SECTION C



PERFORMANCE WORK STATEMENT (PWS) OPERATION AND MAINTENANCE

OF

DEFENSE FUEL SUPPORT POINT SAN PEDRO, CA

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SECTION C-1.0 GENERAL

C-1.1 General Description

This PWS is established to identify Contractor responsibilities for the operation, maintenance, product quality surveillance, inventory control and accounting, security, safety, and plant protection of the Defense Fuel Support Point (DFSP) San Pedro, CA.

DFSP San Pedro is a gathering and distribution terminal on the West Coast. The terminal is located at 3171 North Gaffey Street on the eastern slope of Palos Verdes Hills, between Gaffey Street and Western Avenue, in the City of San Pedro, County of Los Angeles. The facility is comprised of approximately 300 acres surrounded by both residential and commercial property and includes a pier facility at the Long Beach harbor complex.

C-1.2 DFSP Mission

DFSP San Pedro is responsible for receiving, storing, distributing and accounting for DLA-owned products (JP5 and JP8) in support of authorized DOD activities.

C-1.3 Contract Turnover

The Contractor will receive, during the ten working days prior to the start of contract performance, assistance from current personnel, representatives from DESC and the Contracting Officer's Representative (COR) to accomplish a joint facilities turnover inspection, product testing and inventory. During the last ten working days of this contract, the incoming Contractor's personnel shall be permitted access to the terminal to observe its operation. The outgoing Contractor shall assist DESC, the COR and the incoming Contractor to accomplish the facility turnover inspection, product testing, and inventory accounting.

C-1.4 Contract Performance

The Contractor shall monitor performance and ensure contract compliance in accordance with the Contract Compliance Plan submitted under Clause L201.00. The Contractor shall perform tasks listed in Section C-2.0 and achieve performance standards for each task. The Contractor shall, for certain tasks, submit performance based plans to provide assurance that the Contractor will meet the performance standards while complying with applicable regulations. The Contractor shall ensure compliance with all applicable Federal, State and Local laws and regulations. The Contractor is responsible for obtaining copies of all applicable laws and regulations, including future changes, if needed.

The Contractor shall establish and maintain a Workplace Drug Testing Program that is in compliance with the "Mandatory Guidelines for Federal Workplace Durg Testing Programs" Executive Order No. 12565 of September 15, 1986 and section 503 of Pub. 100-71, 5 USC section 7301 note, the Supplemental Appropriations Act for fiscal year 1987 dated Jul 11, 1987.

The COR will distribute a quarterly customer satisfaction survey that will be used as part of the assessment of contract performance. The COR has the option to increase the frequency of the survey or address contract compliance as needed.

C-1.5 Contractor Detailed Plans

Following contract award, the Contractor shall have 60 days, unless otherwise indicated, to submit the detailed plans listed below to the COR and Contracting Officer for review and acceptance. The plans are considered dynamic documents and shall be updated, as required, throughout the contract period.

Maintenance Plan: The plan shall clearly outline the detailed procedures for planning, programming, accomplishing and documenting maintenance and repair of equipment and facilities.

Operations Plan: The plan shall provide comprehensive and detailed step-by-step procedures covering all requirements specified in C-2.1.

Product Inventory Control and Accountability Plan: The plan shall provide comprehensive and detailed procedures to ensure compliance with the requirements of Clause I119.04, DoD 4140.25M and Section C-2.3 of the PWS.

Safety Plan: The detailed plan shall outline procedures necessary to maintain safety in accordance with applicable Federal, Sate and local laws and regulations.

Security Plan: The comprehensive and detailed plan shall clearly identify staffing and procedures necessary to maintain security as outlined in Section C-2.9 and incorporate all elements of the concept plan. This plan shall be submitted within 30 days after contract award.

Training Plan: The detailed plan shall identify pertinent course titles, length, training source, a brief description of the course, the employees to be trained (by job classification), the frequency of training and method of monitoring plan compliance. This plan shall include all elements of the concept plan.

The following detailed plans submitted with the Contractor's proposal shall be in effect upon contract award. These plans shall be updated, as required, throughout the contract period.

Contract Compliance Plan Product Quality Surveillance Plan

C-1.6 Contractor Furnished Equipment

The Contractor shall provide all supplies, tools, equipment and vehicles not otherwise specified as Government-furnished and necessary by the Contractor to complete tasks outlined in Section C-2.0 or as required by all Federal, State and Local laws and regulations. In addition, the following shall be provided by the Contractor:

Petroleum Products Measurement and Sampling Equipment First-Aid Equipment Administrative/Computer Supplies Janitorial and Housekeeping Supplies, and Equipment Tank Truck Seals Tank Truck Placards

Combination Flammability and Oxygen Deficiency Monitors (including serviceable oxygen sensor) Incidental Fuel Cleanup Supplies for Contractor's own use

Communication Service Requirement: A minimum of one outside commercial trunk line shall be provided at each of the following locations:

(1) the terminal gate house; (2) the main terminal office; (3) the main terminal operations area and include dial-up access to the Government's inventory accounting system utilizing Government-furnished computer and software; (4) the terminal fuel pier operations area;

<u>Note</u>: to fulfill the phone requirement at the gate house, the contractor may, at his option, provide a separate telephone number, or an extension from the telephone at the main terminal office.

The terminal office and the terminal gate telephones shall be interconnected with a telephone intercom system.

to provide Communication capability between Superintendent and Assistant Superintendent and pipeline Line Rider.

Detex Clock tapes/Dials

Underground Service Alert: The contractor shall obtain Membership in the Underground Service Alert to include a private telephone and teleprinter.

Vehicles: The Contractor shall supply the necessary vehicles needed to operate and maintain the facility in accordance with the provisions of the contract.

Heavy Duty Four-Wheel Drive Vehicle (minimum one half ton rating) with trailer hitch, wiring, licensing, and needed accessories to provide the capability for transporting terminal equipment in support of daily operations and emergencies.

Terminal Guard Patrol Vehicles: Two vehicles, one for each of the two roving guards who will use them for patrolling the grounds outside the normal terminal working hours (4:00 a.m. to 4:00 p.m. five days per week, Saturdays, Sundays, and holidays).

Heavy Duty Forklift: 4,000 pound capacity for transporting heavy items within the terminal area.

C-1.7 Planning Information

For the purposes of estimating workload, the Contractor shall use a projected 2,780,205 barrels of combined throughput annually. Throughput is defined as receipts plus issues divided by two. Projected workload information for specific fuel operations is found in Section C-2.0 of the PWS.

Figure 1: Projected Throughput

Receipts/Issues	Quantity in BBLS
Receipts	2,765,031
Issues	2,795,379
Total Receipts and Issues	5,560,410
Throughput	2,780,205

Historical annual workload information is presented in Exhibits 1 and 2. Historical workload data presented in this PWS is provided for informational purposes only.

C-1.8 Personnel Staffing Objectives

The Contractor shall provide sufficient personnel staffing to accomplish terminal functions and tasks identified in Section C-2.0. The Contractor's staffing and personnel objectives shall be flexible and capable of meeting the demands of simultaneous operations. The most frequent simultaneous operations involve tank truck shipments, pipeline receipts and issues and pier operations. The Contractor shall schedule personnel so that no individual works more than 12 hours in one shift, followed by an 8 hour break, except in emergency situations as approved by the COR.

C-1.9 Normal Workday Operations

Operating hours are outlined in Table 1. Normal workday operations include product receipts, issues, transfers, blending, quality surveillance, preventive and corrective maintenance, security and supporting functions as described in Section C-2.0. All costs that may be associated with these operations shall be included in the price for CLIN 0001.

Table 1: Operating Hours

DFSP San Pedro Main Terminal				
Operations Control Center (Bldg 113)	24 hrs/day, 365 days/yr			
Routine Fuel Pier Ops/Quality Surveillance	0800-1600, 365 days/yr			
During tanker/barge or Navy ship Ops	24 hrs/day until operations are completed			
Pipeline Ops/Quality Surveillance	24 hrs/day, 365 days/yr			
Truck Fill Stand/Quality Surveillance	2400-1200, 5 days/wk*			
Tank to Tank Transfers	0700-1600, 5 days/wk*			
Security	24 hrs/day, 365 days/yr			
All Other Terminal Functions	0600-1500, 5 days/wk*			
*5 days/wk is Monday-Friday, excluding weekends and holidays as stipulated in the wage determination.				

C-1.10 Personnel Qualifications

The Contractor shall ensure that personnel assigned to all tasks have the requisite knowledge and skills to meet minimum performance standards and comply with all applicable Federal, State and Local laws and regulations. They shall be able to speak, read and comprehend English (be literate) to the extent of reading and understanding printed regulations, detailed written orders and operating procedures, training instructions and materials and be able to compose reports which convey complete information.

C-1.11 Kev Personnel

<u>Corporate Fuel Officer</u>: To assure continuity between the terminal and the Contractor's home office, the Contractor shall employ during the life of this contract an executive who can make decisions concerning this contract; who has a complete understanding of the terms and conditions of this contract; and who has experience in the operation and maintenance of bulk petroleum storage terminals.

<u>Fuel Director/Terminal Superintendent</u>: Shall have a minimum of six years of specialized experience in fuel terminal operations including receiving, storing and shipping petroleum products via tank truck, pipeline and tanker/barge. This experience shall include operation and maintenance of a bulk petroleum storage terminal; receiving and shipping of petroleum products via pipeline, barges, tankers and tank trucks; and maintenance and repair of bulk petroleum storage terminals.

Shall have a minimum of three years of supervisory experience gained within five years just prior to the contract start date. Of these three years, two years of experience shall be specialized supervisory experience in fuel terminal operations with emphasis in terminal maintenance, operations and environmental compliance. One year may be general supervisory experience.

Education may be substituted for all specialized experience. In order to substitute education for specialized experience the minimum requirement is a masters degree in petroleum, industrial or business-related fields.

This cannot be a collateral duty job.

<u>Deputy Fuel Director/Assistant Superintendent</u>: Shall have a minimum of three years experience in fuel terminal operations engaged in receiving, storing and shipping petroleum products via tank truck, pipeline and tanker/barge. This experience shall include operation and maintenance of a bulk petroleum storage terminal; receiving and shipping of petroleum products via pipeline, barges, tankers, and tank trucks; and maintenance and repair of bulk petroleum storage terminals.

This may be a collateral duty job.

The Contractor agrees to assign to the contract those persons whose resumes and personnel qualifications statements were submitted as required above to fill the requirements of the contract. No substitution or addition of personnel shall be made except in accordance with this contract.

The Contractor agrees that during the first 60 days of the contract performance period no personnel substitutions will be permitted unless such substitutions are necessitated by an individual's sudden illness, death or termination of employment. In any of these events, the Contractor shall promptly notify the Contracting Officer and provide the information required below.

If personnel for whatever reason become unavailable for work under this contract for a continuous period exceeding 30 work days or is expected to devote substantially less effort toward the work than indicated in the proposal, the Contractor shall propose a substitution of such personnel in accordance with the following:

All proposed substitutions shall be submitted, in writing, to the Contracting Officer at least 15 days prior to the proposed substitution. Each request shall provide detailed explanation of the circumstances necessitating the proposed substitution, a complete resume for the proposed substitute and any other information required by the Contracting Officer to approve or disapprove the proposed substitution. All proposed substitutes (no matter when they are proposed during the performance period) shall have qualifications that are equal to or higher than the qualifications of the person being replaced.

In the event a requirement to increase the specified level of effort for a designated labor category, but no change to the overall level of effort of the contract occurs, the Contractor shall submit to the Contracting Officer a written request for approval to add personnel to the designated labor category. The information required is the same as that required above. The additional personnel shall have qualifications greater than or equal to at least one (1) of the individuals proposed for the designated labor category.

The Contracting Officer shall evaluate requests for substitution and addition of personnel and promptly notify the Contractor, in writing, whether the request is approved or disapproved.

If the Contracting Officer determines that suitable and timely replacement of personnel who have been reassigned, terminated or are unable to perform under the contract is not reasonably forthcoming or that the resultant reduction or productive effort would impair the successful completion of the contract, the contract may be terminated by the Contracting Officer for default or for the convenience of the

Government, as appropriate. Alternatively, at the Contracting Officer's discretion, if the Contracting Officer finds the Contractor to be at fault for the condition, he may equitably adjust (downward) the contract price or fixed fee to compensate the Government for any delay, loss or damage as a result of the Contractor's action.

C-1.12 Additional Personnel Needs

<u>Fuel Distribution System Operator</u> (as defined in the Service Contract Act Directory of Operations): Shall have a minimum of one year experience in storage and distribution of bulk petroleum. Lead Operators shall have a minimum of two years experience.

<u>Operations Control Center Operators</u>: Shall have a minimum of three years experience with automated controls.

<u>Line Rider:</u> Shall have a minimum of one year experience.

<u>Fuel Distribution System Mechanic</u> (as defined in the Service Contract Act, Directory of Operations): Shall have a minimum of three years experience.

<u>Electrician</u> (as defined in the Service Contract Act, Directory of Operations): Shall have a minimum of three years experience.

Other Personnel Needs

The tasks outlined in Section C-2.0 may require other special licenses, skills, training or certifications. Personnel will be required to operate heavy equipment. The Contractor shall evaluate task requirements and provide qualified personnel to complete tasks in accordance with all applicable Federal, State, and Local laws and regulations.

C-1.13 Notification of Correspondence and Visits

The Contractor shall immediately provide the Contracting Officer, the Defense Energy Region (DER) and COR with copies of all correspondence and notification of any visits relating to Federal, State and Local officials/agencies.

C-1.14 Defense Energy Region (DER) Office

The DER is responsible for defining authorized DoD customers within the region. The DER has complete jurisdiction over the movement of fuel. The DER will define the customers and quantities of fuel to be moved. Daily coordination of fuel movement shall be left to the Contractor, as long as customers and quantities match the Source Identification and Ordering Authorization (SIOATH). The Contractor shall refer all problems pertaining to transportation (such as demurrage, routing and loss of product while in transit, furnishing tank trucks, etc.) to the appropriate DER office and notify the COR. The Contractor shall schedule tank trucks and barges to be loaded with carrier(s) designated by the DER. The DER will notify all activities to be supported and a copy of this notification will be furnished to the Contractor. This notification will also serve as a release document for the Contractor and may be in SIOATH or other format.

SECTION C-2.0 SPECIFIC TASKS (CLIN 0002 – FIRM FIXED PRICE)

Unless otherwise specified within this Section C-2.0, all functions described herein shall be included in the firm fixed price for CLIN 0001. Please note that the firm fixed price shall include all effort required to recognize and initiate response actions for those supplies/services that are reimbursable under CLINs 0002-0005.

C-2.1 Terminal Product Operations

Terminal fuel operations in support of DoD activities are defined as:

Terminal Product Operations - Receipts;

Terminal Product Operations – Issues;

Terminal Product Storage and Transfers.

The Contractor shall submit comprehensive operational plans with detailed procedures as outlined in Figure 2, 60 days after the contract start. These plans will be reviewed and approved by the Contracting Officer. The detailed plans shall include the number of proposed employees identified by the wage determination and job classification and shall be in accordance with the staffing plans addressed in Section L.

Figure 2: Required Contractor Operational Plans

Petroleum Product Issue Procedures
Petroleum Product Receipt Procedures
Petroleum Product Transfer Procedures

Requirement:

- All operating personnel shall be able to recognize and handle potential hazards to avoid dangerous exposure and to develop safe working habits, practices and skills.
- All personnel shall have access to operational plans.

Minimum Performance Standards:

- 100% documentation and compliance with Government approved Operational Plans.
- 100% documentation verifying all operations are conducted in accordance with Government approved staffing charts.

The Contractor shall be responsible for performing fuel operations and safeguarding fuel supplies during normal and adverse conditions.

C-2.1.1 Terminal Product Operations

DFSP San Pedro is tasked with receiving, storing and issuing JP5 and JP8 to authorized DoD customers. The DFSP is comprised of the following main components:

Main Terminal Tank Farm:

Tankage:

Eleven (11), 50,000 barrel concrete underground storage tanks holding JP8 with a shell capacity of approximately 530,000 bbls.

Nine (9), 50,000 barrel concrete underground storage tanks holding JP5 with a shell capacity of approximately 430,000 bbls.

Six (6), 50,000 barrel concrete underground storage tanks which are out-of-service.

Three (3), 55,000 barrel above ground floating roof tanks which are out-of-service.

One (1), 14,000 barrel concrete underground storage tank used for transmix collection.

Pipelines:

Approximately nine (9) miles of on-terminal pipeline systems.

Approximately 20 miles of off-terminal pipeline and associated manifold systems.

Approximately 70 valve pits and 625 assorted size valves for product transfer into and out of the terminal.

Government-owned "G" pipeline, 8 inch, from various refineries. The line is currently out of service and purged in nitrogen.

Government-owned "R" pipeline, 12 inch, from Willmington area. The line is currently out of service and purged in nitrogen.

10-inch San Pedro multi-product pipeline approximately 15 miles from San Pedro to Watson, CA.

Automated Fuels Handling Equipment (AFHE) System:

DFSP San Pedro is equipped with a computerized Supervisory Control and Data Acquisition (SCADA) system called the Pollution Control Equipment (PCE) System which allows for remote monitoring and operation of valves and pumps. Additionally, the system provides data management capability. The central processing unit (CPU) located in the Control Room at Building 113 can be used by the operator to control the movement of fuel through the operation of motorized valves and can provide the operator with essential information such as tank gauging. The integrated system provides continuous on-line monitoring of all product storage and movement. Tank levels, fuel operations (flow), motor-operated valve (MOV) positions, pump status, meters and certain security aspects of terminal operations are also monitored.

The tanks are configured with VAREC type float level gauges. These gauges have electrical transmitters that communicate continuously with the PCE CPU. All changes in tank levels are automatically reported to the control house operator through computer terminals. Tanks are configured with high and low operating alarms, which alert the operator when level set points have been reached. Alarms are both audible and visual. The tanks have high limit alarms, which are set in software to warn the operator that maximum safe fill levels are being approached. Each tank has a mechanical high level switch, which is preset to automatically close the tank's primary valve when maximum safe fill is reached.

Using the PCE CPU, the operator prescribes "authorized" and "unauthorized" product movement. For each receipt, issue or transfer evolution, the operator must preset the PCE system to notify the CPU that product movement is "authorized." The computer automatically sets a high and low limit of 1/16-inch either side of the liquid level in a closed tank and alarms will occur if the fuel moves to either limit if

prior notification of product movement is not given. Additionally, during an authorized evolution, product quantity leaving a source (tank or meter) is automatically compared to product quantity reaching a destination (another tank or meter). If the quantities are out of balance, an alarm is displayed so that the operator can investigate the discrepancy.

All motor-operated valves are controlled by the operator at the PCE CPU. The PCE system will sound an alarm and alert the operator if a MOV should become stuck during operations.

In addition to tank, flow, valve and meter alarms, the PCE is programmed with numerous informational alarms that alert the operator to system tampering or equipment malfunctions. Remote control valves and pumps have switch alarms to indicate when control is taken from the operator at a local control panel. Field equipment cabinets have door alarms that sound when opened. Pumps have vibration, pressure and temperature alarms that sound and shut down pumps when tolerances are exceeded. Built-in test equipment is included in the computer equipment for self-diagnostics, and the microprocessors are backed up with non-interruptible power supplies.

The data management function involves the generation of inventory, transfer and other reports from the data collected and compiled by the Control Room Computer.

The Contractor is responsible for all preventive maintenance of the PCE except for those areas outlined below. The maintenance of the PCE is not a part of this contract and is covered under a separate contract which provides:

On-call services 24 hours, 365 days per year;

Repair and/or replacement maintenance of all systems-related computer equipment and peripherals;

Repair and/or replacement maintenance of all Remote Interface Unit (RIU) equipment;

Repair and/or replacement maintenance of all PCE system instrumentation;

Software maintenance of all PCE systems software;

Annual on-site calibration of PCE system instrumentation;

Annual master prover calibration certification;

Life Cycle Costing (LCC) report;

Maintenance and updating of all systems-related documentation and technical drawings;

PCE operational support for fuel facility staff (to include, but not limited to call-in support, training and minor systems modifications and upgrades).

<u>Pier Facility – Port of Long Beach Pier 12:</u>

The DFSP pier facility is located at the Port of Long Beach commercial complex. There are two, 18 inch pipelines, approximately five (5) miles long which transfers product between the pier facility and the San Pedro Main Terminal.

The pier is constructed of concrete and is 65 feet wide by 1,065 feel long with a draft pier side of approximately 43 feet at mean low tide.

Receipt Capability: 6,800 bph, 100 psi at dock riser.

Shipping Capability: 6,500 bph, 100 psi at dock riser.

Injection Capability: Hammond Injection System capable of injection FSII and SDA by proportionate

flow meter.

Truck Fill Stand:

Bottom loading facility capable of loading two tank trucks simultaneously, one at each side.

Product is moved by gravity feed from bulk storage to the fill stand.

Additive injection capability (FSII and ASA).

FSII storage 12,000 gl above ground tank.

ASA, 100 gl mix tank.

C-2.1.1.1 Terminal Product Receipts

Fuel is received by pipeline and/or tanker/barge. All fuels shall be sampled and tested in accordance with Section C-2.2.

Pipeline receipts are from commercial refineries via the Government-owned 10-inch multi-products pipeline. Pipeline receipts are made in approximately 40,000 – 110,000 BBL batches. Product arrives by pipeline neat.

All tankers and barges shall be boomed prior to commencing fuel operations. Custody transfer occurs at the vessels' flange mating to the unloading arm.

Figure 3 presents the annual workload projection for receipts. This projection is based on an average of historical transportation modes and frequencies for receipt and a projection of the out-years. See Exhibit 1 for Historical Receipt Data.

Fuel Type	Mode of Receipt	# of Receipts	Qty Received BBLS
JP5	Tanker Barge	2 0	371,234 0
	Pipeline	4	751,116
JP8	Tanker	5	1,174,824
	Barge	0	0
	Pipeline	6	467,857

Figure 3: DFSP San Pedro Projected Annual Receipts

Requirement:

- The Contractor shall test, receive and inventory all authorized products.
- The Contractor shall immediately notify the COR of any operational discrepancies. All individual bulk deliveries of petroleum products in excess of 3,500 gallons shall be corrected to standard temperature of 60 degrees Fahrenheit in accordance with the appropriate API tables.
- The Contractor shall inject fuel additives (e.g. FSII, ASA, and corrosion inhibitor) as required to the levels specified in the product specification, unless otherwise directed by DESC/DER/COR.
- The Contractor shall prepare all documents required for product receipt IAW Clause I119.04.
- The Contractor shall allow each vessel to unload safely at a maximum rate commensurate with terminal capability and shall load safely at the maximum rate commensurate within the facilities/vessel capability.
- Each fuel pier transfer operation shall not occur until the vessel is properly boomed.

Minimum Performance Standards:

- No fuel spills due to Contractor fault, negligence or misconduct.
- No Contractor caused demurrage charges during tanker, barge, or tank truck receipt operations.
- No quantity variations outside the tolerance defined in Appendix D.

C-2.1.1.2 Terminal Product Issues

Fuel is issued via pipeline, tank truck, barge and tanker.

Pipeline issues are primarily by the Government-owned 10" multi-product pipeline for distribution through the Kinder-Morgan Pipeline System. Pipeline issues are generally made in batches of approximately 69,000 barrels. Flow rate: 3,300 bph.

Tanker/Barge issues are made from Pier 12 at the Port of Long Beach Commercial Terminal utilizing any of the two Government-owned 18-inch pipeline systems that connect the terminal to the pier facility.

Tank Truck issues are to a variety of authorized DoD customers: MCAF Camp Pendelton, MCB Twenty Nine Palms, Northrup ADV Systems, Armed Forces Res Center Los Alamitos, NTC Fort Irwin, NWC China Lakes, NAS Point Mugu, Yuma Proving Grounds and others. The tank truck distribution changes annually depending on the DESC bulk product purchases which usually occur in September.

Figure 4 presents the annual workload projection for fuel issues. The projection is based on an average of historical mode and numbers of issues and a projection for the out-years. See Exhibit 4 for Historical Issues Data.

1.8010 10 2121 2011 10110 111111001 122000							
Fuel Type	Mode of Issue	# of Issues	Qty Issued BBLS				
JP5	Tank Truck	1,461	277,652				
	Barge	12	33,356				
	Tanker	1	78,333				
	Pipeline	9	710,362				
JP8	Tank Truck	3,337	634,060				
	Barge	0	0				
	Tanker	1	78,333				
	Pipeline	12	983,283				

Requirement:

- The Contractor shall issue all authorized products.
- The Contractor shall immediately notify the COR of any operational discrepancies. All individual bulk deliveries of petroleum products in excess of 3,500 gallons shall be corrected to standards temperature of 60 degrees Fahrenheit in accordance with the appropriate API tables.
- The Contractor shall coordinate Commercial Carrier delivery 24 hours in advance to avoid emergency transportation charges. The only exception shall be customer initiated requests for transportation of fuel within a 24-hour period.
- Each fuel pier transfer operation shall not occur until the vessel is properly boomed.
- The Contractor shall prepare all documents required for product issues.

Minimum Performance Standards:

- All petroleum products shall be issued on-specification, unless authorized by the Contracting Officer.
- No fuel spills due to Contractor fault, negligence or misconduct.
- No quantity variations outside the tolerance as defined in Appendix D
- No Contractor caused demurrage charges during tanker, barge or tank truck issue operations.
- No operational delays in excess of one hour; time commences once the tanker/barge/truck is ready to receive.

C-2.1.1.3. Terminal Product Storage

The tables shown in Appendix A summarize the storage tanks, their locations and capacities for each product.

Tank to tank transfers may be necessary to accommodate operational requirements. Examples include: emptying a tank for maintenance, increasing the volume of a tank scheduled as an issue tank, blending off non-specification fuels, or transfers associated with additive concentration levels. With the exception of COR directed transfers, decisions on tank to tank transfers are left to the discretion of the Contractor.

Minimum Performance Standards:

- No fuel spills due to Contractor fault, negligence or misconduct.
- No Contractor caused demurrage charges during tanker, barge, or tank truck receipt operations.
- No quantity variations outside the tolerance defined in Appendix D.

C-2.2 Terminal Product Quality Surveillance

No petroleum products shall be received or issued without first determining and confirming conformance with product quality requirements. No conveyance/container shall be loaded until it is inspected by a qualified person and deemed suitable to carry the intended product. Products shall be issued on a first-in, first-out basis unless otherwise approved or directed by the COR. Non-conforming product shall be reported to the COR immediately. Anytime product is received into a tank, the tank's contents shall be suspended from issue pending quality conformance sampling and testing.

C-2.2.1 Sampling

The Contractor shall take all samples and deliver samples requiring Type A or B testing to the commercial laboratory designated by the COR. The Contractor shall test all Type C samples on site with the exception of flash point. Procedures for sampling storage tanks, additives, blend tanks, lines and conveyances/containers shall be in accordance with API Manual or Petroleum Measurements Standards (MPMS), Chapter 8, Section 1, "Manual Sampling of Petroleum and Petroleum Products" and/or Section 2, "Automatic Sampling of Petroleum and Petroleum Products". Procedures include location of sample taken, frequency, quantity, minimum tests required on sample and sample retention procedures. Samples shall be retained for 90 days unless otherwise instructed. The minimum sampling and testing requirements are provided as follows:

Table 2: Minimum Sampling and Testing Requirements

	Inimum Sampling and			TEVEN CAN IN F	TECTRIC	DEMARKS
SERIAL	LOCATION OF STOCKS	TYPE STORAG E	WHEN SAMPLED	TYPE SAMPLE (See Note 1)	TESTING REQUIRED (See Note 2)	REMARKS
1	Upon procurement at: refineries, blending installations, tank farms, terminals, etc.,	Bulk	After establishme nt of new batch.	Upper, Middle and Lower Composite or All-Level Composite from each storage tank.	A	
2/	Storage Tanks and Pipelines, for Pipeline Shipments or Vessel Loading of Government Stocks.					
2a	Storage tanks	Bulk	Before Shipment or Loading	Upper, Middle and Lower Composite or All-Level Composite from each storage tank.	Appearance, API Gravity, Color, Flash Point, Filtration Time, FSII, Water Reaction (as applicable)	Government- owned stocks in tanks which have been tested previously within 90 days need only Type C. Referee sample will be retained.
2b	Pipelines	Bulk	Immediatel y after Start of Shipment or Loading	Line Sample	С	
2c	Pipelines	Bulk	Hourly After Starting Shipment or Loading	Line Sample	Visual	
2d	Pipelines	Bulk	During Loading or Shipment	Representative Line Composite IAW API MPMS, Chapters 8.1 or 8.2.	Retained Composite	Sample to be retained as Referee. Testing to be conducted will be based on the situation.
3 /	Vessel Loading					
3a	Tankers and Barges First-In	Bulk	1 Hour after Start of Loading	Spot	C-Plus Particulate	
3b	Tankers and Barges	Bulk	After Loading	All-Level from each compartment Volumetric Composite of Cargo Tanks	Appearance & Density [For CONSOL: C] B-1	For Gov't Owned Product Only Vessel may sail after "C" Tests; Remainder of tests to be completed before arrival at next Load or Discharge Port.
3c	Yard Oilers	Bulk	After Loading	Volumetric Composite of	API, Flash, BS&W	Normally Yard Oils are in

SERIAL	LOCATION OF STOCKS	TYPE STORAG E	WHEN SAMPLED	TYPE SAMPLE (See Note 1)	TESTING REQUIRED (See Note 2)	REMARKS
4 /	Vessel Discharge			Cargo Tanks		dedicated service and carry ships' fuels.
4a	Tankers and Barges (Multi-Product Cargo)	Bulk	Prior to Discharge	All Level from each Tank	Appearance and Density	If on-spec, discharge authorized.
				Volumetric Composite of Each Cargo on board.	B-1	These tests will be performed prior to or during discharge of cargo. In the event the capability for testing does not exist at the discharge point, a composite sample from the vessel will be retained, type B-1 tests performed on an all-level sample taken from the receiving tank. If receiving tank fails spec requirements, perform B-1 tests on the tanker retain composite sample to determine the cause of the offspec problem
	Tankers and Barges (Single-Product Cargo)	Bulk	Before Discharge	Composite sample of ship or barge tanks.	Type C	spec problem. Discharge is authorized after conformance with Type C tests. Retain composite sample until the receiving tank analysis is complete. If product fails, perform Type B-1 tests on retained composite to help determine the cause of the off-

SERIAL	LOCATION OF STOCKS	TYPE STORAG E	WHEN SAMPLED	TYPE SAMPLE (See Note 1)	TESTING REQUIRED (See Note 2)	REMARKS
						specification problem.
4b	Dock/Discharge Manifold Header	Bulk	During discharge	Sample IAW API MPMS, Chapter 8, commencing one half hour after start of discharge and each hour after until completion of the discharge. One- half quart to be taken each time. Sample to be composited after completion of discharge.	Retained Composite,	Retained for Referee Tests.
				Also, one gallon at one hour, midpoint and one hour prior to completion.	Particulate	
	Dock/Discharge Manifold Header		During Discharge	For split cargo discharges where one product is JP5, JP8 or F76 and other product is JP4, MOGAS or AVGAS, a dock header sample will be taken during discharge of the JP5 or JP8 or F76 one half hour after start of discharge and hourly thereafter.	Flash Point or Explosivity	
4c	After receipt of fuel by waterborne transport.	Bulk	After receipt of fuel.	Upper, Middle and Lower Composite or All-Level Composite.(from each storage tank)	Type B-1	Also, JFTOT after JP4/JP8 receipt by tanker
5 /	Pipeline Receipts.					
5a	After receipt of fuel by pipeline systems used for more than one product.	Bulk	After Receipt of Fuel	Upper, Middle and Lower Composite or All-Level Composite. (from each storage tank)	Type B-1	
5b	After receipt of fuel through a dedicated system.	Bulk	After receipt of fuel.	Upper, Middle and Lower Composite or	Type C, except on initial filling or change of	

SERIAL	LOCATION OF STOCKS	TYPE STORAG E	WHEN SAMPLED	TYPE SAMPLE (See Note 1)	TESTING REQUIRED (See Note 2)	REMARKS
				All-Level Composite. (from each storage tank)	grade. Then, B-1 would be required.	
6 /	Transfers within Installation or Depot					
6a	Through a dedicated system.	Installation s and Depots	After receipt of fuel	Upper, Middle and Lower Composite or All-Level Composite.	Type C	Samples will be retained for two months for referee purposes.
7	Dormant Stocks wherever Located.	Bulk	Periodically , as required by Table 5	Upper, Middle and Lower Composite or All-Level Composite. (see Remarks)	B-2 or A (see Remarks b.)	a. Separate samples; upper, middle and lower, shall be taken and tested to establish homogeneity. If homogenous, these samples shall be mixed for required tests. If not homogeneous, perform a B-2 on each layer of product. Additional testing may be performed. b. At the discretion of the owning or custodial authority, having regard to type of product, age of stock, conditions of storage, etc.
8	Filling Points for road and rail tank car containers or other equipment.	Bulk	Daily on first container filled and on changeover to fresh feed tank after completion of line displacement from the fresh feed tank.	Line sample	Type C	
9	In rail tank cars and road tank vehicles and refuelers used in over	Bulk	Both after loading and before	All level sample from the rail car or vehicle.	Appearance on each compartment	

SERIAL	LOCATION OF STOCKS	TYPE STORAG E	WHEN SAMPLED	TYPE SAMPLE (See Note 1)	TESTING REQUIRED (See Note 2)	REMARKS
	the road transportation	L	discharge		"C" on composite	
10	Packaged Fuel stocks wherever located	Packaged	(a) Periodically as required by Table 2 (see remark (a). (b) When contaminati on or deterioratio n of product or container is suspected. (c) When identity is uncertain	Representative sample IAW API MPMS, Chapter 8	Type B-2 (see Note 4)	
11	Refueler trucks, skid mounted refuelers or other dispensing equipment.	Bulk	(a) Daily (b) Monthly	Line sample. Note: After recirculation of fuel	(see Remarks and Note 3)	(a) Visual check for appearance and Water & Sediment. (b) Lab analyses for Water & Sediment
12.	Waste Oil barge or tank truck	Bulk	Prior to transfer to bulk FOR tank	All level	"Oil," flash, TOC, PCB, AS CR, CD Pb, "Water," Title 22, pH	
13.	FOR Storage Tank	Bulk	After receipt	Upper, middle, lower, & composite	Type A	
14.	FOR Storage Tank	Bulk	6 month dormant	Upper, middle, lower, & composite	Type A + Title 22 & FSO verify	
15	Waste Oil Holding Tanks	Bulk	Prior to acceptance at Waste Oil Reclamatio n Facility	All level	Representative sample Oil & grease pH	
16.	Reclamation Plant	Pretreatme nt process	Prior to draining to sewer system	Representative sample	Oil & grease pH	

TABLE 2 LEGE	END:
Type "A" Test	Complete specification inspection tests.
Type "B-1" Test	Partial analysis comprising the checking of principal characteristics most likely to have been affected in the course of moving the product.

TABLE 2 LEG	EEND:
Type "B-2" Test	Partial analysis to verify characteristics susceptible to deterioration because of age.
Type "B-3" Test	Partial analysis for contamination; in particulate, for controlling the re-injection of pipeline interface products.
Type "C" Test	Specific Gravity, Flash Point, Color and Appearance, including visible sediment and water.
Note (1)	The methods of sampling to be used are those prescribed by API (see Section C-2.4.1)
Note (2)	Where flash point tests are required, a vessel composite(s) shall be run in lieu of each individual tank.
Note (3)	The average particulate content of the 3 fuel samples should not exceed 8 mg/gal (2 mg/L); however, the first and last samples are obtained under severe discharge conditions and may show high particulate content. Solid contamination while extremely objectionable is a physical contaminant which can be removed under proper conditions with proper equipment and since the product at this point is Government owned, discharge operations will not be discontinued for this reason. The Contracting Officer, Defense Energy Support Center and the Quality Assurance representative at the loading point will be advised, however, of any high particulate results obtained, for future planning purposes and possible cleaning action necessary to the vessel involved. This note is not applicable to internal Navy transfers.

C-2.2.2 Testing

The Contractor shall conduct all type C testing required. Calibration of testing equipment required under the provisions of this contract shall be covered in the Product Quality Surveillance Plan. Tables 3 through 5 outline the minimum frequency for testing petroleum and related products by broad category. The frequency of testing may be increased by the COR as required. Considerations for increased testing are conditions of storage, age of stock and type of product. When a dormant product is tested, a record of the results shall me maintained to provide a basis for determining product deterioration. Whenever consecutive results indicate possible deterioration, testing frequency shall be increased. Report the findings to the COR for further action. This is especially important for a property such as color, which presents no operation problem, but may be an indicator of possible deterioration. Individuals performing product quality testing shall be properly trained and qualified. Type A and B testing will be performed by commercial laboratories. All costs associated with Type A and B testing will be funded directly by DESC. The Contractor shall report any non-responsiveness of the commercial laboratory to the COR immediately for resolution. All laboratory reports shall be reviewed and kept on file to ensure compliance with specification requirements.

Table 3: Minimum Frequency For Testing Petroleum Products

	MINIMUM TESTING	FREQUENCY (Number of Months)	
PRODUCT DESCRIPTION	(Number of Months)		
	BULK	PACKAGED	
Turbine Fuels, Aviation	6	12	
TABLE 3 NOTES:			
Product stored in collapsible containers shall be tested every month as a minimum.			

Table 4: Testing Required, Aviation Turbine Fuels 1/

PROPERTIES	B-1 TEST	B-2 TEST	B-3 TEST	C TEST
Water and Solids (Visual) 1/	X	X	X	X
Color (Visual)	X	X	X	X
Specific or API Gravity	X	X	X	X
Solids (Millipore)	X	X	X	
Distillation	X	X	X	
Copper Strip Corrosion	X	X	X	
Freezing Point	X	X	X	
Existent Gum	X	X	X	
Flash Point	X	X	X	X
Water Reaction	X	X	X	
Lead Content (If contamination with leaded fuels suspected)	X	X	X	
Fuel System Icing Inhibitor	X	X	X	
Filtration Time (JP8)	X	X	X	
Water Separation Index (JP8) 2/3/	X	X	X	
Conductivity (JP8) 4/	X	X	X	
Thermal Stability		X		
Color (Saybolt)		X		
Acid Number		X		

TABLE 4 NOTES:

C-2.2.3 Record Keeping and Reports

The Contractor shall be responsible for maintaining detailed sampling and testing logs. Each storage tank shall have a current analysis test report on file. Customers shall be provided copies of tank test reports upon issuance of product. Historical product quality records shall be maintained. All laboratory reports shall be reviewed and kept on file for the duration of the contract to ensure compliance with specification requirements. These reports shall be turned over to the Government at the end of the contract.

Workload Projection:

- 100% sampling of all receipts, static storage, transfers and issues.
- 100% Type C testing. Type A and B tests will be conducted by Commercial laboratories as indicated by the COR. The Contractor is responsible for delivery and monitoring turnaround time of commercial lab testing.

^{1/} Clean and bright and free of non-dissolved water. Obtain sample in a clear round one quart glass bottle, swirl the bottle vigorously so a vortex is formed. Visually check for sediment at the point of the vortex. If sediment is visible, a spot larger than 3 mm in diameter indicates corrective action should be taken to prevent the delivery of contaminated fuel.

^{2/} If the capability does not exist to perform this test at the terminal, a sample will be sent to the nearest service laboratory that does have the capability. In the event operational necessity dictates issue of product before results are obtained from the service laboratory, shipments may be made; however, when laboratory results indicate failure on a recurring basis, notify COR.

^{3/} Water separation index, modified, testing is not performed if the fuel contains conductivity additive (ASD).

^{4/} If fuel contains conductivity additive (ASD), conductivity readings should be taken within two minutes of sampling.

Requirement:

- Quality of all petroleum products received, stored and issued meets specification requirements.
- Quality of all petroleum product shall be verified as suitable for their intended use.
- Records and petroleum samples shall be maintained to resolve quality concerns.
- The COR shall be notified immediately of any fuel sample failure prior to fuel receipt, shipment or custodial transfer.
- Samples representing incoming and outgoing shipments of Government-Owned products at the terminal shall be properly marked by the Contractor as to product, source, and date taken and shall be stored by the Contractor in the designated sample storage area. The Contractor shall retain such samples as required above.

Minimum Performance Standards:

100% Sampling and testing prior to, during and after all receipts, issues and transfers. No tanker discharges are to begin prior to initial sampling and testing to verify product quality conformance.

No delays in sampling and testing which result in demurrage charges.

Regulations:

API Manual of Petroleum Measurement Standards (MPMS), Chapter 8, Section 1, "Manual Sampling of Petroleum and Petroleum Products" and Section 2, "Automatic Sampling of Petroleum and Petroleum Products'.

C-2.3 Terminal Product Inventory Management and Reporting

The DER is responsible for establishing authorized customers and quantity of fuel to be supplied by SIOATH. The Contractor is responsible for daily planning and scheduling of issues and receipts. The Contractor shall monitor the movement of fuels continuously and report as required. This shall include tracking customer requests for fuel issues by tank truck, pipeline and monitoring tanker arrivals as scheduled by DESC.

The Contractor shall be responsible for updating the automated accounting system to provide information to DESC and the DER on current inventory levels IAW Clause I119.04. Any anticipated fuel shortages, based on customer requests, shall be reported to the COR immediately.

Workload Projection:

• 100% inventory, control and accountability.

Requirement:

- All products shall be received or issued as required to authorized DoD customers.
- The Contractor shall ensure that products issued are in compliance with the SIOATH.
- All product receipts, issues or transfers shall be properly documented and auditable.
- The COR shall be informed immediately of any discrepancy in inventory.
- Month-end physical inventories made by the Contractor as required by the product accounting and reporting provisions found in Clause I119.04 of this contract shall be accomplished in the presence of a Government representative, unless authorized by the Contracting Officer.

Minimum Performance Standards:

- 100% inventory, control and accountability.
- All reports submitted accurately and on time.

C-2.4 Property Management and Maintenance

Property Management and Maintenance in support of DoD activities is defined as:

<u>Preventive Maintenance (PM):</u> PM is a documented program of recurrent periodic or cyclic scheduled work designed to preserve and maintain equipment, apparatus or facilities in such conditions that they may be effectively used for their intended purpose.

<u>Minor Repair:</u> Minor Repair shall include, but is not limited to, repairs such as replacing gaskets, packing, stripped bolts, etc.

C-2.4.1 Maintenance – General

The Contractor shall be responsible for preventive maintenance and minor repair of terminal facilities and equipment in accordance with contract Clause I114, other applicable contract provisions, and the Government Operations and Maintenance Manuals available on-site . The Contractor shall provide all manpower, materials and equipment not otherwise specified as Government-furnished to accomplish preventive maintenance.

C-2.4.1.1 Preventive Maintenance and Minor Repair – Facilities and Equipment

The Contractor shall ensure that all Government Property is preserved and maintained in a safe working condition. It is essential that the Contractor devotes adequate effort to the preventive Maintenance of Government Property. The Contractor shall ensure that the costs for preventive maintenance and minor repair are included in CLIN 0001 on a firm-fixed price basis.

Preventive Maintenance: The Contractor shall provide for the inspection and servicing of equipment and facilities at time intervals that meet or exceed manufacturer recommendations for preventive maintenance. PM includes performing, at a minimum, the recurring services recommended by the manufacturer or in accordance with commercially accepted practices, as well as the effort required to keep a facility, piece of equipment or system functioning. The listing of GFE and facilities is at Appendices A and B. While the Government does not plan to dictate specific PM requirements or practices, The Operations and Maintenance Manuals for DFSP San Pedro reflect the minimum allowable frequencies for PM associated with the various facilities and equipment at DFSP San Pedro. The Contractor's PM program shall provide a systematic approach to planning, scheduling, documenting/reporting and managing (labor, materials and time) to perform those actions that contribute to the uninterrupted functioning of the fuel terminal. The PM program shall include periodic inspection, testing and minor repair of equipment and facilities in accordance with manufacturer's recommendations or commercially accepted practices.

C-2.4.1.1.1 Buildings

The Contractor shall ensure that the terminal buildings, structures and terminal facilities are maintained in a clean and pest free (roaches, ants, flies, spiders, etc.) conditions. If insecticides or rodentcides are used by the Contractor, only premixed products (aerosols or baits) classified as slightly toxic (signal word "CAUTION" on the label) shall be used. Products classified as highly or moderately toxic (signal words "DANGER" or "WARNING" on the label) shall not be used.

The Contractor shall be responsible for building maintenance and janitorial services. Each building shall be kept clean and free of debris.

The Contractor shall, at his own cost, replace broken window glass, repair minor roof leaks; repair minor electrical failures (e.g.: change fuses, reset circuit breakers); and furnish and replace burned out bulbs.

The Contractor shall not permit or allow fire hazards, such as oily rags, loose paper and trash to accumulate in any of the terminal buildings.

The Contractor shall not permit or make any alterations to the terminal building or facilities without prior permission/approval, in writing, from the Contracting Officer.

The Contractor shall protect the vacant and unused buildings located on the terminal and ensure that the buildings are kept clean and free of debris. The Contractor may use a specific building or bunkers, at the option of the Government, for protection and storage of Contractor-owned equipment provided that prior written approval is obtained from the COR. The Contractor may not permit other non-Government activities access to the vacant buildings.

C-2.4.1.1.2 Minor Painting and Spot Painting

The Contractor shall accomplish minor painting as part of its housekeeping requirements. Minor painting shall consist of painting pumps, valves and applying color code bands as prescribed by Military Standard Identification Methods for Bulk Petroleum Products Systems, MIL-STD-161, except for the requirement of paragraph 5.1.1 of MIL-STD-161 which requires such markings on the storage tanks.

Spot painting is painting needed to protect equipment, pipes, tanks, buildings, fences, etc., or to keep the major portion of the paint in good condition. Spot painting is repainting of equipment, etc., when paint has chipped or loosened from painted surface. When more than 25% of the surface requires painting, this will not be considered spot painting. All vertical surfaces above 10 feet from existing secure footing, which require spot painting, shall be accomplished by the Contractor after issuance of a task order under CLIN 0002.

Paint and primer used shall be oil base type suitable for use on metal, exterior surfaces and shall be matching or compatible with existing surface paint.

C-2.4.1.1.3 Pumps

The Contractor shall maintain all the terminal pumps in a serviceable condition by performing inspections and maintenance, such as adjusting the packing, stuffing glands, mechanical seals, providing lubrication, replacing gaskets and pump seals, tightening loose bolts and repairing and adjusting valves. Inspection and maintenance shall be performed as outlined in the PM Plan.

C-2.4.1.1.4 Valves

The Contractor shall provide maintenance and inspection on all types of valves. The Contractor shall as required, dismantle valves to replace worn parts, replace gaskets, repack stuffing glands, lubricate, reseat, polish and provide for frequent inspection and operations of each valve in the terminal manifold and pipeline system as outlined in the PM Plan.

The Contractor shall replace unserviceable valves with new Government-furnished valves or contractor acquired (See Section C-3.0 LOGISTICS SUPPORT).

The Contractor shall ensure that the valves at each tank are in the closed position except when the tank is actually being utilized to receive, issue, or transfer product. The Contractor shall ensure that all applicable valves are in the closed position except when product is actually being received, issued or transferred through a particular pipeline, manifold or system.

C-2.4.1.1.5 Pits

The Contractor shall ensure that all valve pits and pipeline pits are kept clean and free of debris. The Contractor shall remove any water and/or fuel that may accumulate in the pits and shall periodically allow the pits to air so that moisture can escape and reduce/prevent corrosion by oxidation. In the event any pit appears to contain excessive fuel vapors or if there is free fuel in the pit, the Contractor shall inspect all pipeline connections (flanges), valves, controls, etc., in order to locate the source of the leak. The Contractor shall immediately take action to correct the defect if considered a minor repair. Other maintenance and repair will be approved by the COR and scheduled via Section C-3.0, LOGISTICS SUPPORT.

There are three deepwell valve pits. The pits vary in depth up to 20 feet. Prior to entry, all confined spaces shall be certified safe for entry IAW 29 CFR, OSHA Confined Space Regulations.

The Contractor must recognize the procedures for removing water from the valve pits may require the Contractor to utilize a vacuum truck.

C-2.4.1.1.6 Pier Facilities

The Contractor shall ensure that the terminal pier facilities including the control building are kept clean and free of debris and that all equipment is in good working conditions. The Contractor shall ensure that structural components of the pier is in a damage free condition and that none of the components are missing.

The Contractor shall correct or have corrected any defects and any unsatisfactory conditions (e.g. grounding cable, pipeline, hoses, valves, lighting, etc.)(that would interfere with terminal pier operations.

The flexible vessel grounding cable resistance to ground shall be measured monthly. The resistance from the free end connector to ground shall not exceed 25 ohms. A higher reading indicates poor connections or a faulty ground switch. (NOTE: If piping is cathodically protected, one does not measure resistance from cable free end to ground. Instead, one measures resistance of cable from free end to piping). The reading should be approximately zero ohms.

C-2.4.1.1.7 Truck Fill Stand

The Contractor shall ensure that the truck fill stand is clean and free of debris and that the truck fill stand containment area is free of product residue (e.g., product drips, spills, etc).

The Contractor shall inspect the truck fill stand on a continuing basis for the presence of leaks, faulty equipment, loose connections, clogged filters and need for repairs.

All truck fill stand loading assemblies shall be checked by the Contractor for electrical continuity. Continuity checks shall be made between the fixed piping section of the truck fill stand and the end of the discharge or drop tube of the loading assembly. the continuity checks shall be made through the entire range of movement of the loading assembly. If during the checks, electrical continuity is not established or is broken, the truck fill stand shall be out of service until repaired. The continuity checks shall be performed by the Contractor at least every three months (NOTE: Jumpers shall not be installed around insulated joints used to isolate a section of cathodically protected piping from a non-protected section).

For piping which is not chathodically protected, the Contractor shall ensure that piping resistance to ground shall not exceed 25 ohms and shall check the piping resistance annually.

The Contractor shall measure the truck grounding cable resistance to ground monthly. The resistance from cable clip end to ground shall not exceed 25 ohms.

The Contractor shall inspect, test and ensure that all static ground conductors for the truck fill stand are serviceable.

The Contractor shall perform the necessary maintenance for the truck fill stand and shall replace ground wires, clamps, connections, gaskets, O-rings and burned out light bulbs. The Contractor shall overhaul valves, clean and replace filters and strainers, and perform other minor repairs as needed.

C-2.4.1.1.8 Fuel Meters

The calibration of fuel meters shall be accomplished under CLIN 0002.

C-2.4.1.1.9 Filters and Filter Separators

The Contractor shall maintain the filter separators (e.g., change filter separator elements, store spare filter elements, prepare used elements for disposal, accomplish minor repairs and replace defective filter separator components such as gaskets, spacers, washers, etc.) in accordance with the manufacturers' recommendations.

C-2.1.1.10 Oil/Water Separator System

The Contractor shall arrange to clean the oil/water separator systems at least once each 12 month period. The cleaning shall as a minimum provide for removal of fuel residue and other debris from each compartment/chamber. The oil/water separator systems shall be inspected on a continuing basis to ensure proper operation and to protect against improper discharge.

C-2.4.1.1.11 Strainers/Basket Strainers

The Contractor shall clean and inspect the strainers/basket strainers monthly.

C-2.4.1.1.12 Hoses

Hoses Other Than Fuel Hoses: The Contractor shall drain and cap hoses after each use. The Contractor shall test all hoses other than fuel hoses annually as prescribed by Federal, State and Local regulations.

Fuel Hoses: Fuel hoses shall be drained and capped and stored on hangers or other supports when not in use. The Contractor shall test hoses annually at 1½ time the maximum allowable working pressure (MAWP). The MAWP is defined in 33 CFR. the Contractor shall mark the testing dates on the outside where it can be seen. the Contractor shall replace hoses when necessary. The hoses will be provided by the Government or the Contractor will be directed to purchase the hoses under Section C-3.0, LOGISTICS SUPPORT.

C-2.4.1.1.13 Cathodic Protection System

Cathodic protection rectifiers and sacrificial anode installations shall be tested monthly for amperage and voltage outputs. A "cathodic protection operating log" recording test results shall be maintained by the Contractor utilizing Government-furnished forms. A copy of the monthly record shall be forwarded to the Contracting Officer, DER, and the COR by the first of each month. Inoperative cathodic protection systems shall be reported immediately to the Contracting Officer, DER and the COR.

C-2.4.1.1.14 Manifolds

The Contractor shall inspect manifolds for leaks and general condition of equipment daily. The Contractor shall accomplish minor repairs including, but not limited to, replacing gaskets, reconditioning valves and spot painting. The Contractor shall keep manifolds clean and free of debris, and if the manifold is in a pit, the pit shall be kept free of water.

C-2.4.1.1.15 Electrical Bonding, Static Grounds and Insulators

The Contractor shall check electrical bonds for continuity of current flow, static grounds for resistance, and insulators for non-flow current conditions. Checks shall be made monthly and a record shall be maintained of these readings by location. Repairs shall be made immediately by the Contractor where the readings are not within acceptable limits. The bonding through the system tanks, piping, loading system and structures shall not be rated satisfactory by the Contractor if the resistance measured from any one point on the system to any other point exceeds 25 ohms. The static ground rods with a resistance value greater than 10,000 ohms shall not be utilized by the Contractor as static grounds.

C-2.4.1.1.16 Emergency Generator and Driver

The Contractor shall clean, inspect and perform scheduled maintenance on the emergency generator per the manufacturer's maintenance manual and in accordance with the PM procedures in the DFSP Operations and Maintenance Manual, Volume V.

C-2.4.1.1.17 Grounds Maintenance

The Contractor shall provide all labor, tools, materials, supplies, equipment and management necessary to provide grounds maintenance services within terminal areas designated. Maintenance services shall be performed in accordance with all Federal, State and Local laws and regulations and the requirements specified below:

The Contractor shall:

Maintain lawns and beds. This includes:

Mowing, cutting and trimming all grasses, weeds and other vegetation. All grasses within 20 feet of facilities (buildings, tanks, area above underground tanks, pits, pipelines, fire hydrants) shall be cut to 4 inches or less. Use of herbicides is prohibited.

A 10 foot wide clear zone shall be maintained on both sides of all terminal fencing where ground and elevation conditions permit.

All hillside areas throughout the terminal shall be allowed to remain in a natural state.

Environmental areas which inhabit various endangered species and plant life such as the Palos-Verdes Blue Butterfly, California Gnatcatcher, California Sage Bush, and Loco Weed shall be maintained and protected per the guidance of the Region environmentalist and/or the Navy environmental office.

The Contractor shall coordinate any work which may disturb the habitat area with the Navy biologist, responsible party, and/or Region office prior to conducting the maintenance or repair action.

C-2.4.1.1.18 Trash Collection

The Contractor shall be responsible for the collection of accumulated trash, to include wind blown trash and debris. Under no circumstances shall the Contractor permit or allow accumulated trash to be burned or disposed of within the terminal. The Contractor shall participate in and support any recycling programs.

C-2.4.1.1.19 Pressure Testing

All POL lines and the loading arms shall be pressure tested as per 49 CFR and applicable State and Local regulatory requirements. Each pipeline shall be blinded off by the Contractor prior to starting pressure testing to prevent pressurizing the entire system. All pressure testing documentation required by Federal and State regulations and laws shall be the responsibility of the Contractor and shall be submitted to the Contracting Officer's Representative on the first work day after each test is completed.

C-2.4.1.1.20 Fire Protection System

The Fire Protections System consists of a series of pipelines, pumps, a foam injection system, fire hydrants, one water supply tank and water from two sources (Department of Water and Power and California Water Service). The fire protection system is strategically located throughout the terminal facility with two fire water pumps, one electric and one diesel-driven which is supported by its own water supply tank. The Contractor shall provide the labor, material, equipment and vehicle resources, as necessary, to operate and maintain (including pipeline/hydrant leak repairs, and backflow testing every 6 months per City of Los Angeles) the fire protection system seven days per week, 24 hours per day.

C-2.4.1.1.21 Fencing

The Contractor shall inspect terminal fencing for general condition. The Contractor shall accomplish minor fence repairs which shall include, but not be limited to, painting rust spots on fence fabric, fence posts, gate bands and gate posts; tightening fence fabric; tightening/realigning gates and gate posts; and minor patching (repair/replace fence fabric up to one foot wide and seven feet long).

Requirements and Minimum Performance Standards for Preventive Maintenance and Minor Repair – Section 2.4.1

All information below pertains to requirements and minimum performance standards for preventive maintenance and minor repair.

Requirement:

- All Government property shall be maintained in a safe working condition. Appendices A and B provide listings of all Government-furnished facilities and equipment to be maintained by the Contractor. The Contractor shall develop and execute a preventive maintenance plan.
- The COR shall be informed immediately of abnormal wear, tear, malfunction or breakdown, etc., of Government facilities or equipment.
- Maintenance Records: The Contractor shall make all records available to the COR for review upon request and surrender all such records and engineering data to the COR at the expiration or termination of this contract.
- All other maintenance and repair performed shall be pre-approved by the COR.

Minimum Performance Standards:

- Fuel terminal operations shall not be delayed as a result of facility equipment downtime.
- All equipment and facilities shall be maintained in accordance with the industry standards and approved Preventive Maintenance Plans.

C-2.5 Contractor Personnel Training and Record Keeping

The Contractor shall establish and maintain, during the lifetime of this contract, a training program to ensure that applicable personnel receive training in the areas defined in Figure 5 and all Federal, State, and Local laws and regulations as required. Detailed elements of the training program shall be submitted 60 days after contract award for Contracting Officer review.

Figure 5: Required Contractor Training Elements

First Response Training
Confined Space Entry Training
Environmental Protection Training
Facility Response Plan (FRP) Training
Facility Spill Coordinator (FSC) and On-Scene Coordinator Training (OSC)
Hazardous Communication Training
Hazardous Waste Operations and Emergency Response Training
Lock-Out Tag-Out Training
Personal Protective Equipment Training
Safe Transportation of Hazardous Materials Training
Terminal Safety Training

Requirement:

• All personnel shall be able to recognize and handle potential hazards to avoid dangerous exposure and to develop safe working habits, practices and skills.

Minimum Performance Standard:

• 100% documentation and compliance with the contractor training program.

C-2.6 Contractor Safety Program

The Contractor shall establish and maintain, during the lifetime of this contract, detailed safety procedures in accordance with applicable Federal, State and Local occupational safety and health laws and regulations. Figure 6 lists elements of the safety plan that the Contractor shall submit 60 days after contract award for Contracting Officer review.

Figure 6: Required Contractor Safety Plans

Chemical Hygiene Plan
Confined Space Entry Plan
Hurricane and Disaster Preparedness Plan
Fire Prevention and Protection Plan
Personal Protective Equipment Plan
Safety and Health Standards Plan

Requirement:

- All operating personnel shall be able to recognize and handle potential hazards to avoid dangerous exposure and to develop safe working habits, practices and skills.
- The Contractor shall establish and maintain a smoking policy that prohibits smoking other than in specifically designated areas on the terminal grounds. The Contractor shall provide and maintain a permanent sign posted at the entrance to the terminal that reads: "NO SMOKING EXCEPT IN DESIGNATED SMOKING AREAS." The Contractor shall designate smoking areas and provide signs for those areas that read: "DESIGNATED SMOKING AREA."
- All personnel shall have access to safety plans.

Minimum Performance Standards:

• 100% documentation and compliance with the Contractor's Safety Program.

C-2.7 Mission Support

The Contractor shall establish a working relationship with medical personnel and ambulance services, local fire departments, local police, U.S. Coast Guard, EPA and other Federal agencies as directed by the DER, local Civil Defense organizations and the Federal Emergency Management Agency (FEMA). The Contractor's purpose in establishing working relationships shall be to advise officials that they are operating a Government-Owned facility under the provisions of a Government contract and that in the event of an emergency situation, local assistance shall be requested as appropriate. In establishing working relationships, the Contractor shall maintain a position of responsibility as specified in contract provisions and recognize that any outside assistance requested shall be intended as a means of enhancing the Contractor's ability to continue terminals operations.

C-2.8 Environmental Protection

In addition to the provisions of Clause I116, I180 and I180.2, the Contractor's performance shall be in accordance with environmental plans listed in Figures 7 that will be provided by the Government. Environmental permits and licenses required to operate the terminal will be obtained and maintained by the Government. Compliance requirements as negotiated by the Government may change during the contract period and the Contractor shall modify standard operating procedures and work practices to ensure compliance with any new or revised permits, licenses, laws or regulations.

Contractor responsibilities for spill response under the CLIN 0001 portion of this contract shall include all facets of Tier I spill response identified in the facility response plans for DFSP San Pedro and the pier facility, including:

Immediate response and clean up of minor spills occurring during fueling operations, regardless of Contractor/DoD customer responsibility. The Contractor shall:

Have sufficient personnel available to effectively employ all spill response equipment.

Ensure that Contractor personnel are trained in the safe and efficient use of all spill response equipment. Comply with all drill and exercise requirements mandated under OPA 90.

Maintenance of spill response consumable materials at the levels present during turnover. Replacement of all consumables (i.e., sorbent materials) utilized during Tier I response activities or clean up actions associated with day-to-day operations shall be at the Contractor expense. Consumables shall be replenished anytime the quantity on hand drops 10% below the turnover level.

Tier II and Tier III spill response actions beyond those outlined above are reimbursable under Section 3.0 Logistics Support and shall be documented and executed in accordance with CLIN 0005.

In addition to spill response, the Contractor shall provide all labor, material, equipment and vehicle resources necessary to comply with the Storm Water Pollution Prevention Plan (SWPPP):

The Contractor's responsibilities shall be primarily annual source inspections, visual observations of storm water discharge, storm water sampling from outfalls and transporting samples to a designated laboratory for testing.

Figure 7: San Pedro Government Provided Environmental Documents:

Spill Prevention Control and Countermeasures (SPCC) Plan
Facility Emergency Response Plan (OPA 90)
Oil Pollution Prevention Operations Manual for Pier Operations
Hazardous Waste Management System
National Pollutant Discharge Elimination System (NPDES) Permits Program
Storm Water Pollution Prevention Plan (SWPPP)

Requirement:

- Ensure that all necessary actions are taken to prevent, control and abate environmental incidents.
- If the Contractor receives a Notice of Violation, the Contractor shall immediately notify the Contracting Officer and the COR.

Minimum Performance Standards:

• 100% compliance with all Federal, State and Local environmental laws and regulations and Government provided documents.

C-2.9 Terminal Security

The Contractor shall be responsible for terminal security throughout all DFSP facilities. The functions described herein are the responsibility of the contractor, and are not necessarily guard functions.

DFSP San Pedro Main Terminal is fenced, with a guard building at the main entrance to the terminal off Gaffey Street.

The Contractor shall provide a minimum of one guard during the hours 4:00 a.m. to 4:00 p.m., 5 days per week.

The Contractor shall provide two guards during the hours 4:00 p.m. to 4:00 a.m., 5 days per week, and 24 hours per day on weekends and holidays. These guards shall be roving guards utilizing Contractor furnished vehicles.

A guard shall be stationed at the guard house and observe the vehicle entrance/exit gate during the contract hours for tank truck loading. At other times when access to the terminal is necessary for transaction of Government business, including access by Government personnel assigned to the Defense Energy Region office, the Contractor may utilize his operation personnel working in the operations office, building 113, to control access to the terminal.

DFSP San Pedro Pier Facility is located at the commercial Port of Long Beach, 3500 West Nimitz Road, Long Beach, CA 90802, approximately 5 miles from the main terminal complex.

The Contractor shall provide one guard at the terminal pier facility 16 hours per day, 7 days per week (4:00 p.m. to 8:00 a.m.).

The Contractor shall provide all the labor, materials, equipment, vehicle resources and management necessary to fulfill the security requirements listed below under Requirement.

The Contractor shall establish and maintain, during the lifetime of this contract, a detailed security plan in accordance with the security requirements listed below and all applicable Federal, Sate and Local laws and regulations. The Contractor shall submit the security plan for Contracting Officer review 30 days after contract award.

Requirement:

- Control access to Government-owned facilities.
- Secure all DFSP gates, valves, buildings, systems or tanks when not in use (any exceptions to be authorized by the COR).
- Maintain a visitor and event log.
- Patrol cross-country pipelines in accordance with 49 CFR 195.
- Man the main gate and provide roving patrols sufficient to ensure that the perimeters of the
 facility are not breached and that any safety and/or environmental hazards are identified and
 reported immediately.
- Provide occasional guard force personnel for special details/events such as oil spills, crowd control during accidents, spill response and fires, community events (reimbursable under CLIN 0004).
- Control and coordinate initial containment of fires, explosions, collapses, spills or other catastrophes with minimal damage.

Minimum Performance Standards:

- No unauthorized personnel on DFSP property due to Contractor fault, negligence or misconduct.
- No unsecured gates, valves, buildings or tanks when not in use.
- No damage or loss of Government property due to Contractor fault, negligence or misconduct.

SECTION C-3.0 LOGISTICS SUPPORT – CLIN 0002, 0003, 0004, and 0005 – COST REIMBURSABLE.

The Contractor shall provide supplies, materials, equipment and emergency services not specified elsewhere in this contract when approved and funded by the Contracting Officer or COR. Such approval will be provided in the form of a DD 1149 (Task Order) signed by the Contracting Officer or COR (for task orders within the COR's funding threshold as delegated by the Contracting Officer in a letter of appointment). In emergency situations, the Contractor may receive verbal approval, which will be followed up by written task order within two working days.

Reimbursement under CLINs 0002, 0003 and 0005 shall be for the prime Contractor's allowable, allocable and reasonable direct cost of any subcontracts for furnishing supplies, equipment, material and services specified in Section C-3.0. No additional indirect/overhead costs or fee will be reimbursed.

Reimbursement for overtime, CLIN 0004, shall be for allowable, allocable and reasonable directed overtime labor costs plus fringe benefits and payroll taxes of the prime Contractor's regular employees. Allowable, allocable and reasonable cost will be reimbursed pursuant to FAR, Section 31. No additional indirect/overhead costs or fee will be reimbursed.

The Contractor will <u>not</u> be reimbursed under CLINS 0002, 0003, 0004 or 0005 for any labor costs for using employees during normal work hours in the performance of any task listed under Section C-3.0. Nor will the Contractor be reimbursed under CLIN 0002 for equipment costs using Government-furnished or Contractor-furnished equipment in the performance of any task listed under Section C-3.0.

CLIN 0002 - Services and Equipment/Supplies/Materials Requiring a Task Order

Maintenance and Repair: The Contractor shall provide maintenance and repair beyond preventive maintenance as directed by the Contracting Officer or COR.

The following procedures apply:

Contractor-initiated:

The Contractor identifies in writing to the COR any maintenance which is beyond preventive maintenance and minor repair. The written request shall include the following information:

Description of deficiency Description of corrective actions(s) Description of work Proposed performance period Estimated subcontract cost

The Contractor identifies in writing to the COR the need for supplies, materials and/or equipment which are not provided under this contract as Government-furnished or Contractor-furnished. The written request shall include the following information:

Item Description
Source of Supply
Purchase description
Delivery date
Estimated dollar amount

If approved, a task order will be issued directing the Contractor to proceed. The Contractor shall obtain consent to subcontract when required by and pursuant to Clause I400.09(F) and shall subcontract for the supplies, materials, equipment or subcontract work to a responsible Contractor who is in the business of performing similar work.

Government-initiated:

The Government will determine the need to accomplish maintenance which is beyond preventive maintenance and a written task order will be issued directing the Contractor to proceed.

The Government identifies the need for supplies, materials and/or equipment. If purchase through the Contractor is approved, a task order directing the Contractor to proceed will be issued.

The Contractor shall obtain consent to subcontract when required pursuant to Clause I400.09(F) and shall subcontract for the supplies, materials, equipment or subcontract work to a responsible Contractor who is in the business of performing similar work.

CLIN 0002AA – Services and Equipment/Supplies/Materials Not Requiring a Written Task Order

The Contractor is not required to obtain a written task order for the following services, supplies or equipment/materials. The Contractor shall however when required by the subcontracts clause obtain consent to subcontract pursuant to the General Provisions entitled SUCONTRACTS (COST-REIMBURSEMENT AND LETTER CONTRACTS), FAR 52.244.2 (Alt I).

Monthly Maintenance of Government-furnished Radios

Heating system repairs

Diesel Fuel (for diesel driven generators)

Diesel driven generator parts and supplies

Calibration of fillstand meters, pressure gauges, pipeline mercoids

Annual check of Fire Alarm System

Fire extinguisher maintenance and repair (recharging and servicing)

Cleaning of the oil/water separator

Pipeline strainer elements

Filter elements and parts and supplies

Annual terminal water system backflow prevention test (required by City of Los Angeles)

Reimbursable telephone charges (must be supported by detailed account information).

Booming service for tankers and barges at the Long Beach pier

Recharging and servicing nitrogen cylinders

CLIN 0003 – Emergency Services

Emergency Services: Emergency services include repairs or services required immediately to permit performance of the contract and/or eliminate hazards to life or property following a breakdown of facilities or equipment, accident, fire, or product spill.

Emergency Services include, but are not limited to the following:

Repair to fire suppressions systems and all supplies, materials, and parts required to complete the repair.

Repair of pipeline leaks and all supplies, materials, and parts required to complete the repair.

Sump pump repairs

Tank repairs and cleanup

Fence repairs needed to repair large holes that are potential security problems and all supplies, materials, and parts required to complete the repair.

Security lighting and system repairs and all supplies and materials required to complete the repair.

Heating system repairs and all supplies and materials required to complete the repair.

The following procedures shall be followed:

The Contractor shall report to the Contracting Officer, Defense Energy region and the COR the emergency immediately by telephone.

The Contracting Officer or COR will verify that a n emergency actually exists and orally direct the Contractor to continue work under CLIN 0003 for subcontracted services and supplies and CLIN 0004 for authorized overtime. Oral direction will be confirmed in writing by the Contracting Officer by the end of the next normal workday.

The Contractor shall obtain consent to subcontract when required pursuant to the General Provisions entitled SUBCONTRACTS (COSTS-REIMBURSEMENT AND LETTER CONTRACTS), FAR 52.244.2 with Alt 1.

CLIN 0004- Overtime

The Contractor will be reimbursed for the direct cost plus allowable and allocable fringe benefits and payroll taxes for overtime worked by teh Contractor employees pursuant to the provisions of this contract and the clause entitled PAYMENT FOR OVERTIME PREMIUMS (FAR 52.222-2) within the following additional approval restrictions:

The following procedures shall apply:

The Contractor shall not work overtime nor shall be reimbursed without prior approval of the Contracting Officer or COR pursuant to FAR 52.222-2.

If the Contractor works overtime pursuant to FAR 52.222-2 (a), the Contractor shall notify the Contracting Officer and the Defense Energy region within 72 hours of telephonic notification of the emergency. Overtime information shall include, but not be limited to, the following:

Number of overtime hours worked by position/employee.

Total number of overtime hours worked.

Direct labor cost plus fringe benefits and payroll taxes per hour for each labor category.

Total estimated cost of overtime labor.

The Contractor will not be reimbursed for overtime expenses for emergency repairs or cleanup when those emergencies resulted from the fault, negligence, bad faith or misconduct of the Contractor, its employees or agents.

If the Contractor employee(s) works overtime during the normal work hours specified in section C-1.9, it shall be at the Contractor's expense. The Government will not reimburse the Contractor under CLIN 0003 for such overtime worked by Contractor employee(s).

CLIN 0005 – Emergency Spill Response Services

Tier II and Tier III emergency spill response services include services required to permit performance of the contract and/or immediately initiate clean-up in the event of product spill or other environmental mishap beyond Tier I response required under CLIN 0001.

Emergency Spill Response Services include, but are not limited to, the following:

Clean-up associated with the discovery of a product spill (i.e., pipline leak, tank leak, etc.). Repair to clean-up and control equipment/system and all supplies, materials, and parts required to complete the repair.

Emergency response to spills and leaks.

Disposal services for waste, both hazardous and non-hazardous.

The following procedures shall be followed:

The Contractor shall report to the Contracting Officer, Defense Energy Region and the COR the spill response required immediately by telephone.

The Contracting Officer or COR will verify that a spill response requirement actually exists and orally direct the Contractor to continue work under CLIN 0003 for subcontracted services and supplies and CLIN 0003 for overtime. Verbal direction will be confirmed in writing by the Contracting Officer by the end of the next normal workday.

The Contractor shall obtain consent to subcontract when required pursuant to the General Provisions entitled SUBCONTRACTS (COSTS-REIMBURSEMENT AND LETTER CONTRACTS), FAR 52.244.2 with Alt 1.

The following apply to CLINs 0002 through 0005:

Logistics Fund Statement: The Contractor shall provide a Logistics Fund Statement by the fifth day of each month to the Contracting Officer and the Defense Energy Region.

Contractor Purchasing Standard Operational Procedures: The Contractor shall establish and maintain purchasing standard operational procedures acceptable to the Government. As a minimum, the Contractor shall comply with the following requirements:

The Contractor shall only purchase services and materials from companies who are qualified and engaged in the type of repairs being provided or engaged in providing or manufacturing materials being purchased.

Requirement for Competition: In all cases of commercial procurement, except procurement with the total money value of \$2,500 or less, a minimum of three quotations (verbal or written) shall be obtained and the award shall be to the lowest, responsible, responsive bidder. However, in all cases, regardless of dollar value and urgency, the Contractor shall not award a contract unless it has determined that the price is fair and reasonable. Documentation for this determination shall be included in the task order file.

The Contractor shall procure materials and services at the most advantageous prices with due regard for prompt delivery of satisfactory credits and other benefits. The Contractor shall also take all actions necessary to obtain applicable tax exemptions, reductions and refunds. Reimbursement cost shall be the net cost after taking discounts, rebates, allowances, credits, tax exemptions, reductions and refunds and other benefits.

The Contractor shall prepare a Standard Operating Procedure (SOP) on the Contractor's purchasing policies and procedures to include, but not be limited to, maintenance of purchasing records, policies and procedures on emergency purchases, subcontract, termination, source selection and contract administration. The Contractor shall submit the SOP to the Contracting Officer for review and consent, a copy shall also be sent to the Defense Energy Region. After consent, the Contractor shall adhere to those procedures, unless further reviews of such procedures and policies by the Contracting Officer during the life of the contract reveal deficiencies in the Contractor's purchasing standard operational procedures. Such deficiencies include, but are not limited to, a Contracting Officer's determination that the Contractor's purchasing standard operational procedures do not provide sufficient protection of the expenditure of Government fudns and are, therefore, unacceptable. The Contracting Officer shall notify the Contractor in writing within 14 calendar days of the Contracting Officer's determination of deficiencies in the Contractor's purchasing standard operational procedures. The Contractor shall revise its purchasing standard operational procedures so that it is acceptable to the Contracting Officer. The Contracting Officer will review the Contractor's purchasing methods when determined necessary by the Contracting Officer during the life of the contract.

NOTE: THE SOP SHALL BE SUBMITTED TO THE CONTRACTING OFFICER NOT LATER THAN 30 DAYS AFTER CONTRACT AWARD.

APPENDIX A - GOVERNMENT-FURNISHED FACILITIES

GOVERNMENT FACILITIES: The description of the Government facility is provided as an approximate list of equipment and facilities that make up the terminal and is not intended to be an all-inclusive list. The Government reserves the right to replace defective and worn-out facilities and equipment and to improve and modernize the terminal. Government facilities for use by the Contractor in the performance of this contract are as follows:

A tank farm located at 3171 North Gaffey Street, San Pedro, CA, 90731, with a shell capacity of 1,472,170 barrels.

Twenty-six 50,000 barrel concrete underground storage tanks and three 55,000 barrel aboveground floating roof tanks.

SAN PEDRO TANKAGE AS OF JAN 2001

1		710 01 3711 2001			
		LAST CLEANED	SHELL	FILL	
TANK #	PRODUCT	INSPECTED	CAPACITY	CAPACITY	NOTES
1	N/A	Nov-87	49,168	48,750	Out of Service
2	JP8	Jan-00	50,321	48,747	
3	N/A	Nov-87	49,165	48,747	Out of Service
4	JP8	Jan-00	50,225	48,847	
5	N/A	Sep-00	49,406	48,988	Out of Service
6	JP8	Jan-00	50,351	48,978	
7	N/A	Sep-00	49,273	48,855	Out of Service
8	JP8	Jan-00	50,534	48,971	
9	JP8	Jan-00	50,253	48,889	Out of Service
10	JP8	Jan-00	50,261	48,792	
11	JP5	1996	50,306	48,739	
12	JP5	Sep-00	50,168	48,583	
13	JP8	Jan-00	50,214	48,523	
14	JP5	1996	50,227	48,443	
15	JP5	Sep-00	50,324	48,652	
16	JP8	Jan-00	50,406	48,844	
17	N/A	1996	50,272	48,276	Out of Service
18	JP5	Sep-00	50,353	48,360	
19	JP5	Sep-00	50,314	48,329	
20	JP8	Jan-00	50,439	47,090	
42	JP5	May-94	49,698	46,415	
43	JP5	May-94	49,698	46,415	
44	JP5	Aug-85	49,654	46,380	
45	N/A	Dec-92	46,751	46,404	Out of Service
46	JP8	Dec-92	49,676	46,398	
47	JP8	Aug-93	49,658	46,385	
48	N/A	Nov-99	55,000		Out of Service
49	N/A	Nov-99	55,000		Out of Service
50	N/A	Nov-99	55,000		Out of Service
51	Transmix		14,000		

Building 103: Maintenance building containing a locker room, carpenter shop, tool room, storage area, electric shop, machine shop, and a plumbing shop.

Building 105: One paint locker building.

Building 290: sewage control and pump house containing two automatic electric operated float controlled sewage pumps.

Building 117: One pipeline batch sample house equipped with a 500 gallon underground slop tank.

Building 113: Control office and pump house facility (building number 113) containing a schematic (wall mounted control panel) for each product storage and handling system, The pipeline pressure recorders for the 10-inch pipeline system, that connects DFSP San Pedro to DFSP Norwalk, and for pipeline number 1, 2, and 3 that connects DFSP San Pedro to the fuel pier and tank farm complex located at the mole on Naval Station Long Beach, CA, six electric driven 1,760 GPM Peerless two stage pumps, two electric driven 700 GPM Peerless four stage pumps, and a manifold system made up of hand and motorized operated valves.

Building 301: Storage facility for storage and retention of fuel samples.

Building 209: booster pump house containing one electric driven 1,000 GPM Peerless water pump for terminal fire suppression system.

Buildings 201, 202, 203, 204, 205, and 206: Six pump houses each contains two electric driven 2,100 GPM Johnson pumps. Pump house, 201 and 203 each contain two out-of-service diesel engines.

Building 303: Main control electric power panel utilized for control of terminal electrical power.

Two sump pump houses (one supporting Tank #71 and one supporting tank #52).

Flare stack facility.

Truck fillstand facility capable of loading two tank trucks, one each side, simultaneously. The truck fillstand is a bottom loading facility.

Fuel system icing inhibitor (FSII) injection system (Hammond) located at the truck rack. The FSII injection system is equipped with a 12,000 gallon above ground cone roof tank and a 10,000 gallon above ground storage tank (old converted tank car) for the storage of DIEGME. One Stadis 450 mix tank, 100 gallons, also supports the truck loading facility.

Terminal Pipeline and Manifold System: consisting of 9 miles of on-terminal pipeline and approximately 20 miles of off-terminal pipelines connecting local refineries and the terminal pier and tank farm complex located at the commercial Port of Long Beach, Pier 12. The terminal pipeline and manifold system contains approximately 130 valve pits that are utilized to transfer product into and out of the terminal including off-terminal valve pits and the valve pits located at the terminal pier and tank farm complex. The terminal pipeline and manifold system contains approximately 895 assorted size valves (size 4" to size 18"). The valves consist of Plug valves, double block and bleed valves, gate valves, Hammer line blind valves, and spectacle line blind valves, etc.

Fire Hydrants: Sixty-eight

Antenna Watch Tower, utilized as an antenna tower only.

Truck fillstand for loading slop fuel from tank number 51, single loading arm.

Filter Separator System for each product

Communication Equipment: Portable and fixed radio systems and other associated communication equipment.

Terminal Cathodic Protection System:

Test station 10" Norwalk/San Pedro Pipeline System at Gaffey Street Valves.

Test station "B", 8" "G" pipeline; test station "B" 8" "G" pipeline; test station "D" 14" JP8 pipeline to terminal pier; test station "E" 12" multi-product pipeline to terminal pier.

Resistance Bond Station number 9, B4 V, number 629, Pump House 113.

Test station "A", 12" pipeline to slop tank; test station "A", F76 pipeline to truck fillstand.

Test station water, westside of Pump House 113.

Resistance Bond Station number 7, located in gully west of building number 10.

Test station tank # 51.

Test station tank # 5, UP # 6, 12" pipeline.

Test station tank # 51, south side water test station.

Test station tank # 48, north side water test station.

Resistance Bond Station # 1, tank # 50 test station.

Resistance Bond Station # 2 "Y" in border of JP8 storage tank berm.

Resistance Bond Station # 3 "Y" in border R.D. to tower.

Resistance Bond Station # 4 between tanks # 46 and 47 on road to tower.

Test station tank # 42; water test station west side of tank # 42.

Test Station tank # 43, 44 (two test stations), and 45; water test station tank # 45.

Test station tank # 46, and 47.

Resistance Bond Station at crossover between Valve Pump Station 1 and 2 for JP5 tanks.

Test station at shut off valve # 33, 10" water line.

Water test station, right side of Little League gate.

Test station fire hydrant #31.

Test station tank # 4, valve # 125 fill pipeline.

Test station tank # 6, valve # 72 suction pipeline.

Resistance Bond Station # 10, by tank # 7 on 10" pipeline.

Test station tank # 13, valve # 119 fill.

Resistance Bond Station #11, above rectifier #5.

Test station fire hydrant # 10.

Test station tank # 16, valve # 16 suction.

Test box "A", 10" fill X pipeline.

Resistance Bond Station # 15, south control.

Test station fire hydrant # 16, above Sub Station # 208.

Resistance Bond Station # 13, below Pump Station # 204 by valve pit # 110.

Resistance Bond Station # 14, Domestic Water Supply

Resistance Bond Station # 12, North Control by pipeline scraper trap.

Test station "G" by back gate on Gaffey Street below South Control.

Test station # 18" - 1 pipeline.

Test station # 18" - 2 pipeline.

Test station JP8 pipeline.

Test station JP5 pipeline.

Test station 12" multi-product pipeline.

Static Grounds:

Truck fillstand.

Southwest JP5 bottom loading station; southeast JP5 bottom loading station; northwest JP5 bottom loading station; northwest JP8 top loading station; northeast JP8 top loading station.

Tank # 48, 49, and 50, JP8.

Valve pit # 1 and 2.

Tank # 4, valve pit # 95.

Tank # 6, valve pit # 94.

Tank # 7, valve pit # 78.

Tank # 8, valve pit # 93.

Tank # 9, valve pit # 92.

Tank #10, valve pit # 91.

Tank # 11, valve pit # 101.

Tank # 13, valve pit # 90.

Tank # 15, valve pit # 106.

Tank # 16, valve pit # 65.

Tank # 17, valve pit # 103.

Tank # 19, valve pit # 104.

Tank # 20, valve pit # 88.

Pump house # 113 manifold.

Fuel Pier Facility: The Terminal Fuel Pier Facilities consists of the following equipment and facilities:

Concrete pier, 65 feet wide by 1065 feet.

Main Pier Manifold Pit, located just north and east of the pier entry area off of existing Mole Road, contains the 18-inch JP8, JP5 and F76 fuel transfer pipelines; motor operated valves, metering devices; 12-inch surge pipeline which provides surge relief for the fuel transfer lines via surge relief valves; 8-inch fire water pipeline loop; 8-inch F76 pipeline; 6-inch contaminated oil pipeline; 12-inch ballast pipeline; and six stripping pumps with associated piping. Product Reclamation System:

The JP5 settling system consists of two 2,500 barrel settling tanks (T-251 and T-252), two parallel 10 HP 250 BPH (175 GPM) pumps, two 175 GPM filter separators and associated piping.

The F76 settling system consists of two 2,500 barrel settling tanks (T-253 and T-254), two parallel 10 HP 250 BPH (175 GPM) pumps, clarifiers and associated piping.

The reclamation heating system consists of two insulated 5,000 barrel storage tanks (T-501 and T-502) with heating coils and two parallel 10 HP 250 BPH (175 GPM) pumps. The heat distribution side of the reclamation heating system includes an expansion tank, two circulating pumps, and a steam-to-liquid heat exchanger.

The waste oil system consists of a 2,000 barrel waste oil storage tank (T-201), two parallel 175 GMP inline, vertical centrifugal pumps and a tank truck meter with a 4-inch bottom transfer arm capable of handling 500 BPH (350 GPM).

The Reclamation and F76 issue pump station, located in the southwest quadrant of the tank farm between the JP5 reclamation tanks T-501 and T-502, consists of a raised reinforced concrete pad that

accommodates the cold seal tank, the terminal pumps, the reclamation heating pumps, the F-76 reclamation pumps, the F76 clarifiers, the JP5 reclamation pumps and associated piping and valves. The barge loading/unloading station is equipped with a 6-inch contaminated oil unloading arm capable of receiving contaminated product and transferring the product back through two 6-inch pipelines to the reclamation of settling tanks.

The east tanker loading/unloading station is equipped with a 6-inch contaminated oil unloading arm capable of receiving contaminated product and transferring the product back through a 6-inch pipeline to the reclamation or settling tanks.

Fuel Transfer System (JP8, JP5):

The pier cargo transfer facilities consist of two segregated 18-inch pipelines that extend from the pier tank farm scraper traps through the cargo manifold pit, through the main pier manifold pit and to the barge, east tanker and west tanker loading/unloading stations that are equipped with 6-inch and 8-inch marine loading arms for handling JP8, and JP5 ballast or contaminated oil. The two 18-inch pipelines extend approximately five and one-half miles across the main channel of the Los Angeles harbor and connect to the San Pedro terminal manifold system on North Gaffey Street and the fuel pier facilities. Each of the pipelines is bi-directional, providing for transfer to or from the fuel pier and the San Pedro terminal. The pipeline system includes three seismic valve stations for protective shutdown during high magnitude earthquakes (5.5 Richter or greater), and in the event of line rupture.

Fire Protection System: The fire protection system for the terminal pier facility is made up of the following facilities and equipment:

A fire detection and alarm system comprised of automatic Master Fire Alarms: (Radio Fire Alarm Transmitters with Integral Battery Backup), Pull Boxes for Fire Alarm Station Manual Zones, Fire Alarm Ionization Detectors-ceiling mounted for enclosed locations and associated horns, mounted speakers and sound powered telephones.

Four Master Fire Alarms (Radio Fire Alarm Transmitters) on top of the pier deck: two free standing, one near Bent 29 at the east edge of the deck, opposite issue Station 3 and the other near Bent 12 at the east edge of the deck above issue Station 2. The other two Master Fire Alarms are located at Dock Watch Shed #2 at Bent 19 near the West Tanker Load Station and at Dock Watch Shed #1 near the Barge Load Station. The tank farm Master Fire Alarms are at the east side of the Office, Lab and Control Building and at the entrance to the Multi-purpose Building on the north side.

Nineteen Fire Alarm Pull Boxes are distributed on the fuel pier at the loading stations, issue stations and pump areas.

Seven Fire Alarm Pull Boxes are located within the pier tank farm. Outside the dike wall, west side of issue tank; in-between Settling Tanks and the Reclamation and Issue Pump Station; in-between the Truck Loading Station and the Waste Oil Tank; Outside the dike wall, east side near the Reclamation Heating tank number T-501; outside the dike wall, east side in-between Ballast Tanks; outside the Control Building, north side; outside the Multi-purpose Building, north side.

Fire Water Main connects to the 14-inch Mole water main and ties into the Fire Water Tank number T-301 through a pipeline that runs south through 14-inch x 10-inch tapping sleeve with a 10-inch valve and valve box, a double backflow preventer and a supply controlling manual operated valve into the tank. Fire Water Tank number T-301 is a 24 feet in diameter by 40 feet high, 3000 barrel water storage tank that services the fuel pier and the tank farm. The water storage tank is located in the N/E quadrant of the tank farm.

Fire Pumphouse, located at the east end of the Multipurpose building, contains the 350 HP, 2,500 GPM horizontal, centrifugal, electric diesel Fire Pump, P-FW-01; the 7.5 HP, 45 GPM jockey pump, P-FW02; the associated wall mounted control panels for the electric motor and the diesel engine of the fire pump

and for the jockey pump; a 500 GAL fire foam concentrate tank and the foam proportioning unit with a 4-inch ratio controller; the pumphouse is also equipped with a 12 foot roll-up door located on the north side, an air intake louver in the roof and a 6 foot x 8 foot removable louver above the diesel exhaust manifold that penetrates through the east wall of the pumphouse.

Seven "Wet-Barrel" type fire hydrants that branch from the underground firewater closed loop. Each fire hydrant has a 4-inch pumper connection and two 2-1/2-inch hose connections.

Pier Tank Farm:

The Pier Tank Farm consists of an area approximately 400 feet by 700 feet containing the following:

Receiver Station consisting of three 20-inch receiver stations at the end of the fuel transfer pipelines. Cargo Manifold Pit located adjacent to the Cargo Pumphouse.

Cargo Pumphouse consisting of three 200 HP electric operated centrifugal Cargo Booster Pumps; one 600 HP electric operated centrifugal Cargo Booster Pump.

Tank Farm and Pier Control Room located in a building which contains the tank farm offices, and laboratory facilities.

Barge Loading/Unloading Station:

The Barge Loading/Unloading Station is located north of the manifold pit on the east side of the pier between Bents #6 and #8. The barge loading/unloading station consists of the following; fuel transfer pipelines for JP8 Fuel, and JP5 Fuel that connect to the 18-inch fuel transfer pipelines through motor operated valves; 6-inch manual operated loading/unloading arms for JP8 Fuel, and JP5 Fuel. The 6-inch loading/unloading arms, although dedicated to a single product, are capable of being utilized for any product; the barge station is equipped with a sump pit located at the north end of the barge station. The sump pit is equipped with two vertical lift sump pumps which are operated by a liquid level control system and a 2-inch pipeline which is connected to the 12-inch ballast pipeline system.

West Tanker Loading/Unloading Station:

The West Tanker Loading/Unloading Station is located north of the barge station on the west side of the pier between Bents # 20 and 21. The west tanker station consists of the following: fuel transfer pipelines that are connected to the 18-inch pier fuel transfer pipelines for JP8 Fuel, and JP5 Fuel by motor operated valves; 8-inch manual operated loading/unloading arms; the west tanker station is equipped with a sump pit located approximately at the middle of the southern end of the station. The sump pit is equipped with two vertical lift pumps which are operated by a liquid level control system and a 2-inch pipeline which is connected to the 12-inch ballast pipeline system.

East Tanker Loading/Unloading Station:

The East Tanker Loading/Unloading Station is located approximately two-thirds of the overall length of the pier from the shore, and is north of the west tanker station and is on the east side of the pier. The east tanker station is located at the end point of the three 18-inch fuel transfer pipelines and consists of the following; 8-inch manually operated loading/unloading arms; the east tanker station is equipped with a sump pit located at the north end of the station. The sump pit is equipped with two vertical lift pumps which are operated by a liquid level control system and a 2-inch pipeline which is connected to the 12-inch ballast pipeline system.

<u>NOTE</u>: The manual operated loading/unloading arms at the barge station, west tanker station and the east tanker station are manufactured by EMCO Wheaton, Inc. and are NB/B0030 manual marine units, with counterbalanced swivel joints and 150# Camlock couplings and adjustable jack supports.

Hammond FSII Injection System accessible by the barge station, west tanker station and the east tanker station.

Electronic Control:

The fuel pier electronic control system consists of the following: Microprocessor based, dual (1 unit in service, 1 standby) Gould Model 984 Programmable Logic Controllers in conjunction with an IBM PC-AT Computer, with program software providing the control functions, indications, alarm and data recording. The IBM PC-AT Computer and the following components are the principal hardware items and peripherals of the Programmable Logic Controller/Personal Computer System: 2 - Gould Model 984 PLC Units, 2 - Intecolor Operator's Video Terminal, 19-inch Touchscreen (1 unit used for training), 1 - IBM Proprinter - for Alarms, 1 - IBM Proprinter - For Data Recording; 1/0 Modules are an integral part of the PC/PLC system; Annunciator Alarms and Shutdowns consisting of audible signals and visual onscreen readouts or blinking symbols; Instrumentation, Control Room Microprocessor Keyboard and CRTs (Readout Devices).

Terminal Pier Pipeline and Manifold System Valves: The terminal pier pipeline and manifold system contains approximately 916 assorted size valves (size 1" to size 18"). The valves consist of ball valves, double block and bleed valves, gate valves, check valves, globe valves, and special valves.

Terminal Pier Facility Cathodic Protection:

Impressed Current System Number 1:

Impressed current system number 1 provides cathodic protection for tanks number T-2002, T-2003, T-503, T-201, and the fire water storage tank.

Impressed current system number 1 consists of the following: Rectifier, 24V, 60A, oil immersed with explosion proof fittings, located in the southwest corner of the air compressor room; AC electric supply for rectifier # 1 is provided from CKT #29, panel #1; Rectifier negative cable is connected to the fuel, water, and compressed air lines approximately 60 feet south of rectifier number 1; anode bed for rectifier number 1 consists of 19 - 3-3/4" x 84", 85 pound high silicon iron tubular anodes; Rectifier negative and positive cables, #2 AWG HMP insulated standard copper cable, installed in 1" PVC Class 200, plastic pipe, 24" deep; anode watering system is installed along with the anode bed. The concrete yard box with a female hose connection adapter is located north of tank number T-2002.

<u>Impressed Current System Number 2</u>: provides cathodic protection for tanks number T-251, T-252, T-253, T-254, T-501, T-502, and T-2001.

Impressed current system number 2 consists of the following: Rectifier, 24V, 60A, oil immersed with explosion proof fittings, located on the west side of the office, laboratory and control building; AC electric supply for rectifier # 2 is provided from CKT # 23, Panel # 3; Rectifier negative cable is connected to the fuel, water and compressed air lines south of the office, laboratory and control building; anode bed for rectifier number 2 consists of 19 - 3-3/4" x 84", 85 pound, high silicon iron tubular anodes; Rectifier negative and positive cables, # 2 AWG HMP insulated standard copper cable, are installed in 1" PVC, Class 200, plastic pipe, 24" deep; anode watering system is installed along with the anode bed. The concrete yard box with a female hose connection adapter is located north of fire hydrant number 1213.

<u>Impressed Current System Number 3</u>: provides cathodic protection for the internal wetted surface areas of the fire water storage tank.

Impressed current system number 3 consists of the following: Rectifier, 18V, 16A, oil immersed with explosion proof fittings is located west of the fire water storage tank; AC electric supply for rectifier # 3 is provided from CKT # 27, panel # 1; Rectifier is made at the fire water storage tank; anode bed for Rectifier # 3 consists of 6 outer ring strings with 9 - 2" x 9" high silicon iron anodes per string; the Rectifier negative and positive cables are # 5 AWG HMP insulated standard copper cable.

<u>Impressed Current System Number 4</u>: provides cathodic protection for the wetted surface areas of the 23 steel H14 piles below the water level.

Impressed current system number 4 consists of the following: Rectifier, 8V, 100A, oil immersed with explosion proof fittings is installed near the boat house at the terminal pier; AC electric supply for rectifier # 4 is provided from CKT # 12, Panel # 8; Rectifier negative cable is connected to the steel H-pile system; anode bed for Rectifier # 4 consists of 6 - 4-3/4" x 84", 175 pound, high silicon iron tubular anodes; the rectifier negative and positive cables are # 2/0 AWG HMP insulated copper cable; all 23 steel H14 piles are electrically bonded with a # 2/0 AWG HMP insulated standard copper cable; test box "A" with 4 test leads is installed on the southwest side of the terminal pier. Two test leads from the steel piles, one test lead from the bonding cable of the concrete piles and one test lead from the 18" F76 pipeline are installed and terminated in this box.

Resistance Bond Stations: There are seven Resistance Bond Stations located at the terminal pier. The location of each resistance bond station is as follows:

<u>Resistance Bond Station number 1</u> is located west of the pipeline scrapper traps. The insulator is above ground in the 18" F76 pipeline at the pipeline scrapper traps. There are two test leads from each side of the insulator.

<u>Resistance Bond Station number 2</u> is located near the pipeline scrapper trap. The insulator is above ground in the 18" JP5 pipeline at the pipeline scrapper traps. There are two test leads from each side of the insulator.

<u>Resistance Bond Station number 3</u> is located near the pipeline scrapper trap. The insulator is above ground in the 18" JP8 pipeline at the pipeline scrapper traps. There are two test leads from each side of the insulator.

<u>Resistance Bond Station number 4</u> is located at the northeast corner of the office, laboratory and control building. The insulator is at the point of connection between the underground 14" water and the 4" water lines. There are two test leads from each side of the insulator.

<u>Resistance Bond Station number 5</u> is located south of building number 810. The insulator is at the point of connection between the underground 12" steam line and 2" steam line in the valve pit. There are two test leads from each side of the insulator and two test leads from the underground 12" S.D. line.

<u>Resistance Bond Station number 6</u> is located north of the pump house. The insulator is at the point of connection between the underground 14" water line and the 4" water line. There are two test leads from each side of the insulator.

<u>Resistance Bond Station number 7</u> is located north of the fire water storage tank. The insulator is at the point of connection between the underground 14" water line and the 10" water line. There are two test leads from each side of the insulator.

Sacrificial Anode Systems: There are eight Sacrificial Anode Systems installed at the terminal pier. The Sacrificial Anode systems are located at and/or support the following facilities:

<u>Sacrificial Anode System number 1</u> is located at tank number T-2002 and provides cathodic protection of the wetted surface areas of the tank.

<u>Sacrificial Anode System number 2</u> is located at tank number T-203 and provides cathodic protection of the wetted surface areas of the tank.

<u>Sacrificial Anode System number 3</u> is located at tank number T-503 and provides cathodic protection of the wetted surface areas of the tank.

Sacrificial Anode System number 4 for the three 18" pipelines from the point of connection, Harbor Boulevard, San Pedro to test box number 20 (insulator location, west approach). Sacrificial Anode System number 4 provides cathodic protection for the three underground 18" pipeline from Harbor Boulevard to test box number 20 and the steel casings for the pipelines in the area adjacent to Valve Station number 1 and Harbor Boulevard.

Sacrificial Anode System number 5 for the three 18" pipelines at the main channel crossing. Sacrificial Anode System number 5 provides cathodic protection for the three underground 18" pipelines at the main channel crossing between test box number 20 and test box number 21. An insulator is installed in each of the three 18" pipelines at test box number 20, Station 40+10 on the San Pedro side and again at test box number 2, Station 58+10 on the Terminal Island side. There are four Zinc Anode Test Boxes (ZTB) located as follows: ZTB number 1 is located on San Pedro side Anode Beds 1 and 2; ZTB number 2 is located on San Pedro side Anode Beds 3 and 4;

Sacrificial Anode System number 6 for the three underground 18" pipelines from test box number 21. Sacrificial Anode System number 6 provides cathodic protection for the three underground 18" pipelines from test box number 21 to test box number 26 (valve station number 2), There are seven test boxes and 36 - 4 1/2" x 60", 60 pound prepackaged magnesium anodes installed. An insulator is installed above ground in each of the three 18" pipelines at valve station number 2.

<u>Sacrificial Anode System number 7</u> for the three underground 18" pipelines from test box number 26 (valve station number 2). Sacrificial Anode System 7 provides cathodic protection for the three underground 18" pipelines from test box 26 to test box number 80 (valve station number 3). There are 64 test boxes and 226 - 4 1/2" x 4 1/2" x 60", 60 pound prepackaged magnesium anodes installed. There are seven line test boxes installed.

Sacrificial Anode System number 8 for the three underground 18" pipelines from test box number 80 (valve station number 3). Sacrificial Anode System 8 provides cathodic protection for the three underground 18" pipelines from test 80 (valve station number 3) to test box number 91 at the pipeline scraper trap located on the terminal pier tank farm. There are 11 test boxes and 33 - 4 1/2" x 4 1/2" x 60", 60 pound prepackaged magnesium anodes installed. There are nine line test boxes installed near test box number 88.

Static Grounds:

Tank # T-2001, F76.

Tank # T-253, F76.

Tank # T-254, F76.

Tank # T-251, JP5.

Tank # T-252, JP5.

Tank # T-501, heating.

Tank # T-502, heating.

Tank # T-201, waste oil.

Tank # T-503, surge.

Tank # T-2002, ballast.

Tank # T-301, fire water.

East tanker station.

West tanker station.

Barge loading station.

F76 station # 1.

F76 station # 2.

F76 station #3.

Truck fillstand.

EIGHT INCH "G" PIPELINE SYSTEM AND THE TWELVE INCH "R" PIPELINE SYSTEM:

Twelve inch five mile long (San Pedro to Wilmington, CA pipeline, connection at valve number 133) Government-owned "R" Pipeline System is out of service and purged with nitrogen. Previously used to receive F-76 from commercial refineries in the area.

Eight inch two mile long (San Pedro Pump House Number 113 to commercial refinery connection valve number 515) Government-owned "G" Pipeline System is out of service and purged with nitrogen.

APPENDIX B - GOVERNMENT-FURNISHED EQUIPMENT

GOVERNMENT PROPERTY: The Contractor shall submit all data required; maintain all records; and care for, maintain and account for all Government-furnished property IAW Clause I114. The Contractor shall be responsible for the equipment and be required to maintain a signed receipt document furnished by the accountable officer for account number SC0601. Equipment and supply additions to the document may originate from a number of sources including items obtained by the Contractor (Contractoracquired), items provided through Government supply sources and items provided by the government through government-sponsored repair and maintenance services which are not Contractor-acquired (Government-furnished). When an item of Government property is no longer required, the Government, at its discretion may not replace the item.

OTHER GOVERNMENT-FURNISHED PROPERTY: In addition to the installed facilities and other equipment listed in Appendix A, the Government will provide the following supplies and equipment.

Plans: A set of complete plans and electrical diagrams, Plans will show the location of all items of equipment and will include actual distances from permanent structures to all tanks, pipelines, pumps, valves bonds, and other underground fixtures. The plans and electrical diagrams are to be retained at the operating location.

Serially numbered Government Bills of Lading with DLA Form 595a, Receipt For Accountable Forms by Non-DLA Recipients.

Material Inspection and Receiving Reports, DD 250 series.

Single Line Item Release Document, DD 1348 series.

Fuel Additives.

Heating Fuel.

Diesel Fuel (for generators).

Emergency Distribution Plan and changes thereto.

All fire suppression equipment (i.e., fire extinguishers, portable and installed fire suppression equipment) will be provided, overhauled, and when necessary, replaced by the Government. The quantity and type of fire suppression equipment at the terminal will be determined by the Contracting Officer.

Locks and Keys: as required to secure valves, valve pits, gates and buildings. The Contractor shall, as a minimum, provide a detailed listing at the terminal, of each lock and lock set indicating location and use. The Contractor shall also include the names of employees assigned and in possession of keys and key sets and the method of securing standby and spare keys, locks and lock sets in a lockable storage container. Materiel Data Sheets as required by 29 CFR 1910.1200, Hazard Communication Standard.

Maintenance agreement to maintain the Government-owned communications equipment.

Copies of Environmental, permits, licenses, plans, etc.

Government-Furnished Equipment/Property Inventory: The Contractor shall maintain a complete, accurate electronic inventory database. The Contractor shall submit a report of Government-Furnished equipment/property under Contractor custody. The report will be due to the Contracting Officer no later than seven months from the start of the contract and annually thereafter in accordance with FAR part 45, sub-part 45.5.

The Contractor's report shall, as a minimum, provide a complete inventory of all Government-Furnished property under his custody. The Contractor shall identify any and all Government-Furnished property received since the preparation of the last inventory and furnish copies of source documents (i.e., Contractor's invoice and vendor's invoice) for each item of Government-Furnished property.

ITEM <u>NUMBER</u>	NOMENCLATURE	<u>UNIT</u>	<u>QTY</u>
1.	Boat, Punt, 12', Mirrorcraft	ea	1
2.	Boat, Boston Whaler, 16'	ea	1
3.	Motor, Outboard, 90 HP, Mecury, S/N 5672829	ea	1
4.	Motor, Outboard, 9 1/2 HP, S/N 59923	ea	1
5.	Lift Rings	ea	7
6.	Emergency light unit, Teledyne Big Beam	ea	1
7.	Scale, floor	ea	1
8.	Stencil Cutter, 1-inch, S/N 6390410	ea	1
9.	Stencil Cutter, 1/2-inch, S/N OSH301	ea	1
10.	Air Conditioner	ea	4
11.	Hose Dolly	ea	14
12.	Boom, Oil Spill, Reel mounted, Type 1, 500', MFG. Kapner	ea	2
13.	Boom, Oil Spill, Reel mounted, Type 1, 1000', MFG. Harding	ea	1
14.	Boom, Oil Spill, Underwater, 1,200'	ea	1
15.	Hose, Fuel, 2" x 25' length	ea	4
16.	Hose, Fuel, 2" x 50' length	ea	3
17.	Hose, Fuel, 3" x 15' length	ea	1
18.	Hose, Fuel, 4" x 7' length	ea	1
19.	Trailer, Utility, w/fire hose, Sears & Roebuck S/N 3171	ea	1
20.	Nozzle, Fire Fighting, 1-1/2"	ea	9
21.	Nozzle, Fire Fighting, Foam pickup	ea	2
22.	Fire, Extinguisher, CO2, 5 lb	ea	1
23.	Fire, Extinguisher, CO2, 7 lb	ea	2
24.	Fire, Extinguisher, CO2, 10 lb	ea	1
25.	Fire, Extinguisher, CO2, 15 lb	ea	44
26.	Fire, Extinguisher, CO2, 50 lb	ea	5
27.	Fire, Extinguisher, Dry Chemical, 20 lb	ea	46
28.	Fire, Extinguisher, Dry Chemical, 30 lb	ea	12
29.	Fire, Extinguisher, Dry Chemical, 50 lb	ea	3
30.	Motorola Desk Top Tone Remote w/Option E376,	cu	3
30.	SN 740CTA2863, 740CTA2864, 740CTA1865740CTA2866,		
	740CTA2867	ea	5
31.	Dector, Containinated Fuel, Model MCFD-A SN93770	ea	1
32.	Antenna, Collinear, Fiberglas	ea	2
33.	Radio Receiver, Plelctlron, Smog Alert System, Frequency	Ca	2
33.	39.98, Tone Frequency Z. CM-CP, S/N R719C3-110567	ea	1
34.	Charger, Rapid, Desk Top, 6 Units SNNTN4796A	ea	2
35.	Charger, Rapid, Desk Top, 1 Unit	ea	1
36.	Radio, Motorolla, Saber 16 Watts PL single Frequency,	Ca	1
30.	SN 654ATE127, 654ATE128, 129, 130, 131, 132, 133,		
	134, 135, 136, 137, 138, 139, 140, 141.	A2	15
37.	Motorola 100 Watt ASE Unit MRS2000 VHF	ea	13
31.	SN C73KSB3100-L1475A	A 2	1
20		ea	
38.	Radius Mobile Radio w/Mike 778TTCO572	ea	1
39.	Heater, Space, Markel	ea	7
39a.	Pump, Reciprocating, Worthington,	20	1
	7-1/2 x 5 x 6, S/N 1610301	ea	1

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40.	Pump, Reciprocating, Gardner Denver, 4 x 6 x 4	ea	1
41.	Pump. Diaphragm, Wilden M15	ea	1
42.	Pump, Hydrostatic Testing, James Mfg	ea	1
43.	Compressor, Air, Kellogg American, S/N 454408	ea	1
44.	Compressor, Air, Ingersol Ran, Type 30,		
	MDL 234C4, S/N 37765	ea	1
45.	Wrench, Air, Chicago Pneumatic Tool Company	ea	1
46.	Clock, Guard, Amano tape	ea	3
47.	Nozzle, Y Gate, 2 1/2 to double 1 1/2	ea	2
48.	Nozzle, Y Gate, 2 1/2 to double 2 1/2	ea	1
49.	Stand, Printer, Walnut, 30" x 24" x 26", P/N 310987	ea	2
50.	Work Station, Standard, 48" x 30" x 26", P/N 310912	ea	1
51.	Work Station, 60" x 30" x 26", P/N 310961	ea	3
52.	Work Station, Compact, 36" x 30" x 26", P/N 310946	ea	1
53.	Cabinet, Filing, #404, 4 Drawer w/o lock	ea	1
54.	Bookcase, Steel, #403, BR52, Putty	ea	2
55.	Corner, Triangle Leaf, P/N E311001	ea	2
56.	Convertor, 110 AC, 12 VDC, Astron, RS&A, S/N 8810327	ea	1
57.	Gangway, Aluminum, 20 feet	ea	1
58.	Fire Extinguisher, 30 lb, Nipiek	ea	3
59.	Monitor, NEC Multisync XL, 20" Model		
	JC-2001VMA, S/N 92C01103W	ea	1
60.	Keyboard, Advanced Logic Research,		
	Inc. Model RT-101, S/N 00027728689	ea	1
61.	Computer, Flexcache 25386DT Model		
	10, SN 79761	ea	1
62.	Mouse, Logitech	ea	1
63.	Printer, IBM Proprinter XL, S/N 11031592	ea	1
64.	Printer, IBM Proprinter XL, S/N 110305587	ea	1
65.	Dector, Contaminated Fuel Model MCFD-A,		
	SN 93770, NSN: 7H-6630-00-706-2302	ea	1
66.	Video Cassette Recorder, Toshiba, Model 222		
	SN 85926370	ea	1
67.	Television 19" Toshiba Model CF1927B		
	SN 8649972	ea	1
68.	Monitor, Model CM842854, SN 93B09524	ea	1
69.	Keyboard Model FKB4700 SN 1X287473	ea	1
70.	Printer Model KXP2023 SN3AKBUA13447	ea	1
71.	Computer Model 4F51BH-B SN 9338L52131	ea	1
72.	Interface Gauging TP600	ea	1
73.	Monitor Serial DBLCVP-5468-A	ea	1
74.	Keyboard SN SN0002	ea	1
75.	Computer, SN 79761	ea	1
76.	Printers, SN 110315952 and 110305587	ea	2
77.	Computer Model EX3000R AA SN CLO-15254338	ea	1
78.	Monitor Model CVP-5468A	ea	1
79.	Keyboard, SN C915148723	ea	1
80.	Printer, SN 112C0356601	ea	1

APPENDIX C - ABBREVIATIONS AND ACRONYMS

ACO Administrative Contracting Officer

AFB Air Force Base

AFHS Automated Fuel Handling System
API American Petroleum Institute
AQL Acceptable Quality Level
ASA Anti-static Additive

AST Aboveground Storage Tank

ASTM American Society for Testing Materials

ATG Automated Tank Gauging

BBLS Barrels

BPH Barrels per Hour

BPWRS Bulk Petroleum War Reserve Stock
BRAC Base Realignment and Closure
CDR Contract Discrepancy Report
CFR Code of Federal Regulations

CI Corrosion Inhibitor

CLIN Contract Line Item Number
CONUS Continental United States

COR Contracting Officer's Representative

DEO Defense Energy Office

DESC Defense Energy Support Center (formerly the Defense Fuel Supply Center

(DFSC))

DFAMS Defense Fuel Automated Management System

DEH Department of Environmental Health

DFSP Defense Fuel Support Point
DIC Document Identifier Code

DIEGME Di Ethylene Glycol Monomethyl Ether, a type of FSII

DLA Defense Logistics Agency DoD Department of Defense

DoDAAC Department of Defense Activity Address Code
DoDAAD Department of Defense Activity Address Directory

DSN Defense Switched Network
EDP Emergency Distribution Plan
EPA Environmental Protection Agency
FAR Federal Acquisition Regulation
FAS Fuels Automated System

FEMA Federal Emergency Management Agency

FRP Facility Response Plan
FSC Facility Spill Coordinator
FSII Fuel System Icing Inhibitor
FSL Low Sulfur Fuel Oil

GFE Government-Furnished Equipment
GOCO Government-Owned Contractor-Operated

IAW In accordance with

ISSA Inter-Service Support Agreement

JPO Joint Petroleum Office

LOA Length Overall

SP0600-01-R-0101 Performance Work Statement

MBBLS One Thousand Barrels
MCAS Marine Corps Air Station
MGAL One Thousand Gallons
MILCON Military Construction

MILSCAP Military Standard Contract Administration Procedures

MILSPETS Military Standard Petroleum System

MILSTRIP Military Standard Requisitioning and Issue Procedure

MIRR Material Inspection and Receiving Report (DD Form 250 series)

MPMS Manual of Petroleum Measurement Standards

MRP Maintenance & Repair Project
MSC Military Sealift Command

NFPA National Fire Protection Association

NPDES National Pollution Discharge Elimination System

NSN National Stock Number

OICC Officer-in-Charge-of-Construction

OPA Oil Pollution Act
OSC On-Scene Coordinator

OSHA Occupational Safety and Health Administration

PCO Procuring Contracting Officer

PH Pumphouse

PM Preventive Maintenance

PMI Preventive Maintenance Inspection
POL Petroleum Oil and Lubricants
POS Peacetime Operating Stock
PQA Petroleum Quality Assurance
PWS Performance Work Statement

QASP Quality Assurance Surveillance Plan

QCP Quality Control Plan

SCBA Self Contained Breathing Apparatus

SDA Static Dissipater Additive

SIOATH Source Identification and Ordering Authorization

SOP Standard Operating Procedure

SPCC Spill Prevention Control and Countermeasure Plan

TSN Transaction Sequence Number UST Underground Storage Tank VCR Video Cassette Recorder VIN Vehicle Identification Number

APPENDIX D - DEFINITIONS

Allowable Intransit tolerance factor: Is 0.2% for cargos not requiring cleaning, gas-freeing, drop/strip; 0.3% for cargos requiring drop/strip; 0.5% for cargos requiring gas-freeing and cleaning: The amount of fuel which might be lost or gained under normal operating conditions while in transit. *Calculation*: Divide quantity gained or lost by the quantity shipped; multiply by 100 to convert the decimal figure to a percentage factor.

<u>Allowable Storage tolerance factor</u> of 0.25%: The amount of fuel which might be lost or gained under normal operating conditions during storage. *Calculation*: Divide quantity gained or lost for the month (variance between book and physical inventory) by the sum of the beginning inventory, receipts and gains through regrade and additive injections; multiply by 100 for percentage factor.

<u>Automotive Gasoline (MOGAS)</u>: A volatile mixture of liquid hydrocarbons, generally containing small amounts of additives, suitable for use as a fuel in spark-ignition internal combustion engines. ASTM D-439 provides additional detailed chemical and physical characteristics of unleaded and leaded gasoline.

<u>Aviation Gasoline (AVGAS)</u>: Gasoline based fuels used in piston driven aircraft. Specifications for these fuels are provided in ASTM D-910.

Barrel: 42 U.S. gallons.

<u>Contracting Officer</u>: Includes the Procurement Contracting Officer (PCO) and the Administrative Contracting Officer (ACO).

<u>Correlation Testing</u>: The testing of POL products (three times a year). A program that provides a means to cross-check and monitor the accuracy of local test procedures.

<u>Class C Laboratory:</u> A facility with the capability of testing samples to determine specific gravity, flash point, color and appearance, including visible sediment and water.

<u>Class B Laboratory:</u> A facility with the capability of conducting all tests which a Class C Laboratory can perform as well as any additional testing required to evaluate samples for contamination; in particulate, for controlling the re-injection of pipeline interface products, any characteristics susceptible to deterioration because of age, and any principle characteristics most likely to have been affected in the course of moving the product.

<u>Class A Laboratory:</u> A facility with the capability of conducting all tests which Class B and Class C Laboratories perform as well as additional testing required to obtain a complete specification inspection.

<u>Diesel Fuel</u>: Diesel fuels are used on compression ignition engines in which air enters the engine at atmospheric pressure or is forced in under higher pressure by a pump or blower. Diesel fuels are used to operate compression ignition engines in submarines, gas turbines, destroyer escorts, landing craft, stationary equipment and in other auxiliary units.

Types and Grades

<u>F76</u>, <u>Fuel</u>, <u>Naval Distillate</u>, MIL-F-16884, is suitable for use in compression ignition engines in submarines and shipboard operations at all temperatures above 10 degrees Fahrenheit.

<u>DF-1</u>, is a winter grade diesel fuel intended for use in high-speed automotive diesel engines and gas turbine engines other than aircraft, in areas in which ambient temperatures as low as -32 degrees Celsius may occur. This grade may be used for medium-speed stationary engine applications.

<u>DF-2</u>, is a regular-grade diesel fuel oil intended for use in all automotive high-speed/medium-speed engine applications and gas turbine engines other than aircraft.

<u>Fuel Additives</u>: Chemicals added to petroleum products to inhibit undesirable characteristics.

<u>Fuel System Icing Inhibitor (FSII)</u>: This additive prevents airframe fuel system, engine filter and engine fuel control icing.

Static Dissipater Additive (SDA): This additive increases the fuel's conductivity and helps relax static electric charges which are produced during fuel handling operations. Used primarily in JP4. The Navy utilizes relaxation chambers to control static electric charge build-up. Also referred to as Anti-Static Additive (ASA).

<u>Jet Fuel</u>: Jet fuels are used in aircraft turbine engines, ramjet engines and other turbine powered equipment. Specifications for jet fuels are provided in MIL-T-5624.

Types and Grades

<u>Grade JP5</u> (NATO Code F-44), is a high flash point (140 degrees F) kerosene type fuel, which was originally developed for use by carrier based aircraft where a safer fuel other than JP4 was required for storage aboard the carrier. The vapor pressure of JP5 is normally zero and it is now the principal aircraft fuel used by the Navy ashore and afloat. JP5 may be used in ground-based turbine and diesel engines.

<u>Grade JP8</u> (NATO Code F-34), is a kerosene fuel similar to commercial jet fuel, (COMJET) A-1, except JP8 contains fuel system icing inhibitor as well as other additives. It is also similar to JP5 with respect to most fuel properties except flash point (100 degrees F minimum) and freeze point. Due to its flash point, it can not be used for shipboard operations.

<u>Grade JP4</u> (NATO Code F-40), is a low flash point wide boiling range petroleum product including both gasoline and kerosene boiling range components.

<u>COMJET A-1</u>, is a relatively high flash point distillate of the kerosene type used predominately by commercial <u>and</u> civil aircraft. COMJET A-1 is procured under ASTM D-1655.

<u>Lubrication Oils</u>: Refined from petroleum crude or synthetically prepared compounds and used to lubricate (*i.e.*, reduce friction, between moving parts). As a result of the reduced friction, moving parts remain at a cooler temperature and wear less. Generally, chemicals are added to the basic oil during processing to achieve other desired qualities. Many oils in use have a viscosity rating; i.e. a numeric expression of the degree to which the oil resists flow under an applied force.

<u>Neat Fuel:</u> Petroleum product that meets procurement specifications but has not been injected with one or more fuel additives (*i.e.*, FSII, SDA and /or CI).

Other Maintenance and Repair: Maintenance and repair beyond that defined as preventive is other maintenance and repair. This includes unplanned repair or replacement of material or components that

show abnormal wear or fail. This maintenance will be approved by the COR and is reimbursable under CLIN 0002 (See Section C-3.0, CLIN 0002).

<u>Preventive Maintenance</u>: Preventive maintenance is a program of recurrent periodic or cyclic scheduled work designed to preserve and maintain equipment, apparatus or facilities in such condition that they may be effectively used for their intended purpose.

Throughput: Receipts plus issues divided by two equals terminal throughput.

APPENDIX E - REGULATIONS

The following is a brief list of the regulations referenced in Section C of the PWS and <u>is not an all inclusive listing</u>. It is incumbent upon the contractor to ensure full compliance with all Federal, State and Local laws and regulations.

Regulation	Title
2 CCR 3	Title2, Division 3, Chapter 1, Article 5, paragraph 2395 Spill
	Containment for Transfer Operations
29 CFR	Title 29, Labor
33 CFR 154	Oil Pollution Regulations for Marine Transfer Facilities
40 CFR 112	Oil Pollution Prevention
40 CFR 122	Ballast Water and NPDES Permits
40 CFR 260-268	EPA Hazardous Ballast Handling and Disposal Program
49 CFR 194	DOT Onshore Pipeline Regulations
49 CFR 195	Transportation of Hazardous Liquids by Pipeline
49 CFR 199	Drug and Alcohol Testing
API MPMS	API Manual of Petroleum Measurement Standards (MPMS),
	Chapter 8, Section 1, Manual Sampling of Petroleum and
	Petroleum Products and Section 2, Automatic Sampling of
	Petroleum and Petroleum Products
California Code of Regulations	Title, all applicable
DoD 4140.25-M	DoD Management of Bulk Petroleum Products, Natural Gas and
	Coal
DoD 4150.7	DoD Pest Management Program
FAR 52.222-2	Payment for Overtime Premiums
FAR 52.244-2	Subcontracts (Cost Reimbursement and Letter Contracts)
FAR part 45, sub-part 45-5	Government Property, Management of Government Property in
	the Possession of Contractors
FAR Section 31	Contract Cost Principles and Procedures
MIL-STD-161	Military Standard Identification Methods for bulk Petroleum
	Product Systems
MIL-HDBK 844 (AS)	All Applicable
National Fire Codes	NFPA National Fire Codes
National Association of Corrosion Engineer (NACE) standards	Cathodic Protection Testing

EXHIBIT 1 – DFSP SAN PEDRO HISTORICAL RECEIPTS (SEPT 1998-2000 AND PROJECTION)

RECEIPTS 1998-1999

FUEL TYPE	MODE OF RECEIPT	# OF RECEIPTS	QUANTITY RECEIVED (BBLS)
JP5	TANK TRUCK	0	0
	BARGE	0	0
	TANKER	1	79,525
	PIPELINE	4	180,354
	TOTAL		259,879
JP8	TANK TRUCK	0	0
	BARGE	0	0
	TANKER	8	860,416
	PIPELINE	8	479,621
	TOTAL	_	1,340,037
	TOTAL		1,599,916

RECEIPTS 1999-2000

FUEL TYPE	MODE OF RECEIPT	# OF RECEIPTS	QUANTITY RECEIVED (BBLS)
JP5	TANK TRUCK	0	0
	BARGE	0	0
	TANKER	4	564,177
	PIPELINE	2	165,851
	TOTAL		730,028
JP8	TANK TRUCK	0	0
	BARGE	0	0
	TANKER	6	998,591
	PIPELINE	9	539,426
_	TOTAL		1,538,017
	TOTAL		2,268,045

PROJECTED RECEIPTS 2000-2001

FUEL TYPE	MODE OF RECEIPT	# OF RECEIPTS	QUANTITY RECEIVED (BBLS)
JP5	TANK TRUCK	0	0
	BARGE	0	0
	TANKER	2	470,000
	PIPELINE	32	1,907,143
	TOTAL		2,377,143
JP8	TANK TRUCK	0	0
	BARGE	0	0
	TANKER	7	1,665,464
	PIPELINE	6	384,524
	TOTAL		2,049,988
	TOTAL		4,427,131

EXHIBIT 2: DFSP SAN PEDRO HISTORICAL ISSUES (SEPT 1998-2000 AND PROJECTION)

ISSUES 1998-1999

FUEL TYPE	MODE OF ISSUE	# OF ISSUES	QUANTITY ISSUED (BBLS)
JP5	TANK TRUCK	1,871	355,517
	BARGE	12	27,714
	TANKER	0	0
	PIPELINE	2	63,684
	TOTAL		446,915
JP8	TANK TRUCK	3,818	725,486
	BARGE	0	0
	TANKER	0	0
	PIPELINE	9	666,200
	TOTAL		1,391,686
	TOTAL		1,838,601

ISSUES 1999-2000

FUEL TYPE	MODE OF ISSUE	# OF ISSUES	QUANTITY ISSUED (BBLS)
JP5	TANK TRUCK	1,952	370,892
	BARGE	9	32,353
	TANKER	0	0
	PIPELINE	4	307,283
	TOTAL		710,528
JP8	TANK TRUCK	3,681	699,312
	BARGE	0	0
	TANKER	0	0
	PIPELINE	9	711,041
	TOTAL		1,410,353
	TOTAL		2,120,881

PROJECTED ISSUES 2000-2001

FUEL TYPE	MODE OF ISSUE	# OF ISSUES	QUANTITY ISSUED (BBLS)
JP5	TANK TRUCK	561	106,548
	BARGE	8	40,000
	TANKER	1	235,000
	PIPELINE	22	1,760,119
	TOTAL		2,141,667
JP8	TANK TRUCK	2,513	477,381
	BARGE	0	0
	TANKER	1	235,000
	PIPELINE	26	1,572,607
	TOTAL		2,284,988
	TOTAL		4,426,655

EXHIBIT 3: AVERAGE PROJECTION (1998-2001)

ISSUES

FUEL TYPE	MODE OF ISSUE	# OF ISSUES	QUANTITY ISSUED (BBLS)
JP5	TANK TRUCK	1,461	277,652
	BARGE	12	33,356
	TANKER	1	78,333
	PIPELINE	9	710,362
	TOTAL		1,099,703
JP8	TANK TRUCK	3,337	634,060
	BARGE	0	0
	TANKER	1	78,333
	PIPELINE	12	983,283
	TOTAL		1,695,676
	TOTAL		2,795,379

RECEIPTS 98-01

FUEL TYPE	MODE OF RECEIPT	# OF RECEIPTS	QUANTITY RECEIVED (BBLS)
JP5	TANK TRUCK	0	0
	BARGE	0	0
	TANKER	2	371,234
	PIPELINE	9	751,116
	TOTAL		1,122,350
JP8	TANK TRUCK	0	0
	BARGE	0	0
	TANKER	5	1,174,824
	PIPELINE	6	467,857
	TOTAL		1,642,681
	TOTAL		2,765,031